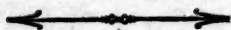


THE BUSINESS GUIDE;
OR,
SAFE METHODS OF BUSINESS.

BY
J. E. HANSFORD, LL. B.,
OF OSGOODE HALL, BARRISTER-AT-LAW,
An Author of "Manual of Evidence in Civil Cases."



HAMILTON PUBLIC LIBRARY

Published by
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TORONTO, ONT.

To whom all communications should be addressed.

1892.



BENJAMIN FRANKLIN.

*Seest thou a man diligent in his business? He shall stand
before kings.—Prov. 22: 27.*

Entered, according to the Act of the Parliament of Canada, in the year
one thousand eight hundred and ninety-two, by JEFFREY E. HANSFORD, at
the Department of Agriculture, at Ottawa.



INTRODUCTION.

THE BUSINESS GUIDE will recommend itself to all who desire, in a concise form, full information as to safe and correct methods of doing business. All the technical terms have been omitted, and the language is plain and comprehensive, so that *any one* may read it and understand it.

The short rules of Arithmetic will be found so practical, so concise, and so complete that it will be a marvel to all who examine the GUIDE. This book has been prepared for the masses, and the theoretical and intricate parts in solving practical problems have been omitted, and only the "*short cuts*" that are right to the point, are used. The "*why*" has been omitted, and the "*how*" thoroughly explained. A business man wants to know the "*how*," and cares but very little for the "*why*."

For lack of the information which this book contains, business men lose thousands of dollars annually, and millions are lost in litigation, owing to the careless habits, or the ignorance of the proper methods of doing business, to say nothing of the loss for the same reasons, by the trickery of confidence-men and sharpers in general.

The BUSINESS GUIDE will be found especially necessary to young men and young women, and will give them many hints and helps in doing business, and will be a safe counsellor and a friend all their lives. The principles can be easily understood, and readily applied and practised. It ought to be in the hands of every teacher and every scholar of sufficient age to understand business transactions. It deserves, indeed, a place in every household.



IT MAKES THE SPARKS FLY.

BUSINESS ENERGY.

"Blest work, if ever thou wert a curse of God, what must His blessings be!"—*J. B. Selkirk.*

"Our greatest glory is not in never falling; but in rising every time we fall."—*Confucius.*

We love our upright, energetic business men. Pull them this way and then that way and the other, they only bend, but never break. Trip them down, and in a trice they are on their feet. Bury them in the mud, and in an hour they will be out and bright. They are not ever yawning away existence, or walking about the world as if they had come into it with only half their soul; you cannot keep them down; you cannot destroy them. But for these the world would soon degenerate. They are the salt of the earth. Who but they start any noble project? They build our cities and rear our manufactories. They whiten the ocean with their sails, and blacken the heavens with the smoke of their steam-vessels and furnace-fires. They draw treasures from the mines. They plow the earth. Blessings on them.



THE ROYAL FAMILY, &c.

THE QUEEN.

Victoria, Queen of Great Britain and Ireland, and Empress of India, born at Kensington Palace, London, May 24, 1819, the daughter of Edward, Duke of Kent, fourth son of King George III., and of Princess Victoria of Saxe-Saalfeld-Coburg, widow of Prince Emich of Leiningen. Ascended the throne at the death of her uncle, King William IV., June 20, 1837, crowned at Westminster Abbey, June 28, 1838. Married, Feb. 10, 1840, to Prince Albert of Saxe-Coburg-Gotha; widow, Dec. 14, 1861.

Issue.

I. Princess Victoria, born Nov. 21, 1840; married Jan. 25, 1858, to Prince Friedrich Wilhelm, eldest son of Wilhelm I., German Emperor and King of Prussia.

II. Albert Edward, Prince of Wales, born Nov. 9, 1841; married March 10, 1863, to Princess Alexandra, eldest daughter of King Christian IX, of Denmark. Offspring of the union are five children:—1. Albert Victor, born Jan. 8, 1864. 2. George, born June 3, 1865. 3. Louise, born Feb. 20, 1867. 4. Alexandra, born July 6, 1868. 5. Maud, born Nov. 26, 1869.

III. Princess Alice, born April 25, 1843; married July 1, 1862, to Prince Frederick William Louis of Hesse-Darmstadt, died 14th December, 1878.

IV. Prince Alfred, Duke of Edinburgh, born Aug. 6, 1844; married Jan. 21, 1874, to Grandduchess Marie of Russia, only daughter of Emperor Alexander II.

V. Princess Helena, born May 25, 1846; married July 5, 1866, to Prince Christian of Schleswig-Holstein.

VI. Princess Louise, born March 18, 1848; married March 21, 1871, to John, Marquis of Lorne, born Aug. 6, 1845, eldest son of the Duke of Argyll.

VII. Prince Arthur, Duke of Connaught, born May 1, 1850; married March 13, 1879, to Princess Louise of Prussia, born July 25, 1860.

VIII. Prince Leopold, born April 7, 1853; died March 28, 1884.

IX. Princess Beatrice, born April 14, 1857, married July 29, 1885, to Prince Heinrich, third son of Prince Alexander of Battenburg, uncle of Ludwig IV., Grand Duke of Hesse.



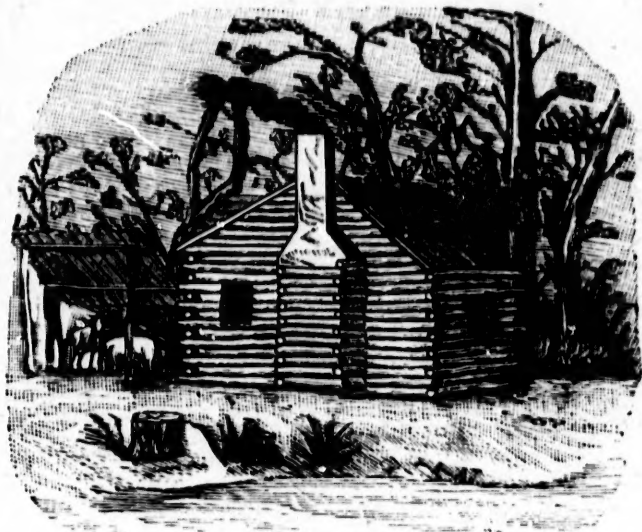
CORNELIUS VANDERBILT EARNING HIS FIRST ONE HUNDRED DOLLARS.

PRACTICAL RULES FOR SUCCESS.

"Economy is itself a great revenue."—*Cicero*.

"Be not simply good, be good for something."—*Thoreau*.

1. Keep your health good by adopting regular and steady habits.
2. Never be afraid to say no. Every successful man must have the backbone to assert his rights.
3. Remember that steady, earnest effort alone leads to wealth and high position.
4. Be not ashamed to work, for it is one of the conditions of our existence. There is not a criminal who does not owe his crime to some idle hour.
5. Never covet what is not your own.
6. Remember that time is gold.
7. To industry and economy add self-reliance. Do not take too much advice, think for yourself. Independence will add vigor and inspiration to your labors.
8. Don't be selfish. Selfishness is the meanest of vices, and the parent of a dozen more. Selfishness keeps a penny so close to the eye that it can't see a dollar beyond.
9. Never forget a favor, for ingratitude is the basest trait of a man's mean character.
10. Never taste or touch that which befogs the mind or dethrones the reason. A drunken man is always at the mercy of his enemies.



THE EARLY HOME OF ABRAHAM LINCOLN, WHO WAS KNOWN AS "HONEST ABE."

HONESTY.

No legacy is so rich as HONESTY.—*Shakespeare.*

He who freely praises what he means to purchase, and he who enumerates the faults of what he means to sell, may set up a partnership with Honesty!—*Lavater.*

What is becoming, is honest, and whatever is honest must always be becoming.—*Cicero.*

Nothing more completely baffles one who is full of trick and duplicity himself, than straight-forward and simple integrity in another.—*Colton.*

Truth and honesty show themselves in various ways. They characterize the men of just dealing, the faithful men of business, the men who will not deceive you to their own advantage. Honesty gives full measure, just weights, true samples, full service, and a strict fulfilment of every engagement.

The truth of the good old maxim, "Honesty is the best policy," is fully demonstrated every day of our life; and uprightness and integrity are found as successful in business

as in everything else. As Hugh Miller's worthy uncle used to advise him, "In all your dealings give your neighbor the cast of the bank—good measure, heaped up, and running over,—and you will not lose by it in the end." Truth is the essence of principle, integrity and independence, and every man needs it. Absolute veracity is more needed to-day than at any former period in our history.

Remember that honesty rises above fortune and above kings; by that alone, and not by the splendor of riches or of titles in glory acquired, that glory which it will be your happiness and pride to transmit unspotted to your posterity. Honesty is greatness itself; dishonesty never made a man great, and never will. Rather be and continue poor, while others around grow rich by fraud and disloyalty, rather be without place or power, while others beg their way upward; rather bear the pain of disappointed hopes, while others win their way by flattery, and forego the gracious pressure of the hand for which others cringe and crawl. Wrap yourself in the cloak of virtue, and seek your bread with an honest hand, and if you grow gray in this cause, with unsoiled honor bless God, and rejoice.

"The honest man, though e'er so poor,
Is king of men for all that."

GOOD MANNERS.

Manners are the ornament of action.—*Smiles.*

Guard manners, if you would protect the morals.—*Davidson.*

Sow good services; sweet remembrances will grow from them.

Mme. De Stael.

Good manners is the art of making easy the persons with whom we are brought in contact.—*Anonymous.*

Virtue itself offends when coupled with forbidding manners.—*Middleton.*

A good name is the best thing in the world; either to get one a good name, or to supply the want of it.—*Anonymous.*

An old saying, "politeness costs nothing, and accomplishes wonders," is a good one. Of course, politeness without sincerity is simply a refined form of hypocrisy, and sincerity without politeness is but little better. A savage, a barbarian can

be honest, but is not likely to be very polite. So politeness of speech and manners is the distinguishing trait between the civilized and the uncivilized.

A coarseness and roughness of speech, a studied effort to say things that grate upon or wound the feelings of a person possessing ordinary refinement, is utterly, inexcusably and wholly indefensible.

There are many persons, however, who seem to have the idea that because they are honest, sincere and sympathetic, after a fashion, they are excusable for being impolite, and consequently justified in cultivating boorish manners, and indulging in rough speech; but this is a mistake. It pays to regard the feelings of others, especially when it costs us nothing. It does not follow because a man is polite that he is therefore insincere. Politeness and sincerity can go together, and the man or woman who possesses both will get along much better than the individual who has either without the other.

BUSINESS MANNERS.

1. Be cheerful, and show proper civility to all with whom you transact business.

2. There are many who have failed in business because they never learned to respect the feelings or opinions of others.

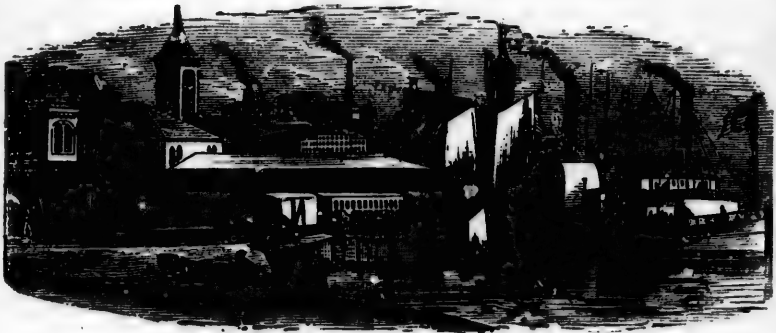
3. Kindness of manners is the best capital to invest in a business, and will bear a higher rate of interest than any other investment.

4. Be accomplished, polite, refined, civil, stable, well-behaved and well-mannered, and you will never lose by it.

5. Manners make the business man, and give him the art of entertaining and pleasing all with whom he has business relations.

6. If you wish to change a man's views in reference to some business transaction or other negotiations, respect his opinions, and he will be respectful and listen to your arguments.

7. There are a thousand easy, engaging little ways, which we may put on in dealing with others, without running any risk of over-doing it.



BUSINESS.

BUSINESS, in every age of the world, has been the chief pioneer in the march of man's civilization. Blessings everywhere follow its advancing footsteps. It travels over no blood-stained fields to secure its noble ends, but everywhere brings man into friendly and harmonious intercourse. It removes local prejudices, breaks down personal antipathies, and binds the whole family of man together by strong ties of association and of mutual and independent interests. It brings men together, and towns and cities are built; it makes man venture upon the seas in ships, and traverse continents on iron pathways, and wherever we go, whether abroad or at home, it is business that controls the great interests of the world, and makes the affairs of men mighty.

HOW TO DO BUSINESS.

One cannot do successfully what he does not perfectly understand. He may have competent employes or trusted attorneys to do his business, but they may do his work imperfectly, or seek their own ease or profit at his expense, and he not being able to detect their malpractices must suffer the loss, or perhaps fail. Or he may attempt to manage everything himself, commit fatal errors, as he will be almost sure to do, and thereby sustain a still greater loss. "First understand every detail of your business, and then go ahead."

A wealthy farmer said, when asked how he made his money, "Sir, *I understand my business* and attend to it." In that reply is the sum and substance of all true success.

EDUCATION.

Stay at school another year or two, and don't be ashamed of what ought to be your glory, that you want to learn more. Step from the district school to the high school, from the high school to the college, if you can. Get a business education by all means,—you will never learn too much. If you desire to become a mechanic instead of an engineer or a farmer, an education will not unfit you to become either. It will always be capital bearing a large income of interest.

"When home and lands are gone and spent,
Then learning is most excellent."

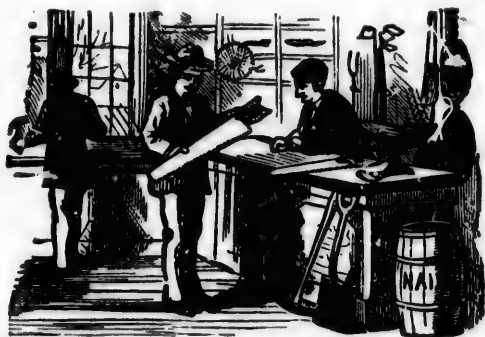
GET INTO THE RIGHT PLACE.

How many poor physicians who would have made masterly mechanics; how many wretched merchants, who would have made noble, athletic farmers; how many pettifogging parchment-minded lawyers, who might have done the community some service as cobblers. No wonder the old philosopher said, "God has made in this world two kinds of holes: round holes and three-cornered holes, and also two kinds of people: round people and three-cornered people, but almost all the round people are in the three-cornered holes and the three-cornered people in the round holes." Hence the uneasiness and unhappiness of society and the failure of so many enterprises. Get into the right place, stay there and master your situation, and success is yours. There never was a business in which all failed. There is always room at the top.

WHAT TO DO.

Young men, you are the architects of your own fortunes. Rely upon your own strength of body and soul. Take for your star, self-reliance. Don't take too much advice—keep at your helm and steer your own ship, and remember that the great art of commanding is to take a fair share of the work. Think well of yourself. Strike out. Assume your own position. Put potatoes in a cart over a rough road, and the small ones go to the bottom. Rise above the envious and jealous. Fire above the mark you intend to hit. Energy, invincible deter-

mination, with a right motive, are the levers that move the world. Be in earnest. Be self-reliant. Be generous. Be civil. Read the papers. Advertise your business. Make money, and do good with it. Love your God and fellowmen. Love truth and virtue. Love your country and obey its laws.



IT NEVER PAYS TO MISREPRESENT THE THING YOU ARE SELLING.

BUSINESS MAXIMS.

1. Your first ambition should be the acquisition of knowledge, pertaining to your business.
2. Above all things acquire a good, correct epistolary style, for you are judged by the business world according to the character, expression, and style of your letters.
3. During business hours attend to nothing but business, but be prompt in responding to all communications, and never suffer a letter to remain without an answer.
4. Never fail to meet a business engagement, however irksome it may be at that moment.
5. Undertake no business without mature reflection, and confine your capital closely to the business you have established.
6. Lead a regular life, avoid display, and choose your associates discreetly, and prefer the society of men of your own type.
7. Avoid litigation as much as possible, study for yourself the theory of commercial law, and be your own lawyer.
8. Never run down a neighbor's property or goods and praise up your own. It is a mark of low breeding, and will gain you nothing.

9. Never misrepresent, falsify, or deceive, have one rule of moral life, never swerve from it, whatever may be the acts or opinions of other men.

10. Watch the course of politics in national affairs, read the papers, but decline acceptance of political positions if you desire to succeed in a certain line of business. Never be an office-seeker.

11. Be affable, polite and obliging to everybody. Avoid discussions, anger, and pettishness, interfere with no disputes the creation of others.

12. Never form the habit of talking about your neighbors, or repeating things that you hear others say. You will avoid much unpleasantness, and sometimes serious difficulties.

13. Endeavor to be perfect in the calling in which you are engaged.

14. Make no investments without a full acquaintance with their nature and condition; and select such investments as have intrinsic value.

15. Never sign a paper for a stranger. Think nothing insignificant which has a bearing upon your success.

16. There is more in the use of advantages, than in the measure of them.

17. Of two investments, choose that which will best promote your regular business.

18. Never refuse a choice when you can get it.

19. Goods well bought are half sold.

20. Goods in store are better than bad debts.

21. By prosecuting a useful business energetically, humanity is benefited.

22. Keep accurate accounts, and know the exact condition of your affairs.

23. Be economical: a gain usually requires expense; what is saved is clear.

24. Reality makes no allowance for wishes or bad plans.

25. Write a good, plain, legible hand.

26. Never gamble or take chances on the Board of Trade.

27. Never take any chances on another man's game.

28. Never sign a paper without first reading it carefully.

29. Keep your word as good as a bank.

30. Remember that an honest man is the noblest work of God.



FAMILY INSTRUCTION.

GOOD ADVICE BY GREAT MEN.

What struggling, and scratching, and shifting, and lying, and cheating is practised every day by mammon worshipers in their eagerness to make money. What a comparison between the successful and the unsuccessful of the millions, who have entered upon the active duties of life's eventful journey. "Honesty is the best policy," and he who weds himself to that principle, though poor, makes life a success. *Anonymous.*

He that departs with his own honesty
For vulgar praise, doth it too dearly buy.
Ben Johnson.

Do you what you undertake thoroughly.
Be faithful to all accepted trusts.
A Boston Merchant.

It is a mistake that capital alone is necessary to success. If a man has head and hands suited to his business, it will soon procure him capital.
John Freedley.

Time is gold, throw not one minute away, but place each one to account. Do unto all men as you would be done by. Never give out that which does not first come in.

From McDonogh's tomb, New Orleans.

There is no boy in America, however humble his birth, who, in whatever capacity his lot may be cast, if he have a strong arm, a clear head, brave heart, and honest purpose, may not, by the light of our public schools and the freedom of our laws, rise until he stands foremost in the honor and confidence of the country.
Congressman Payson, Pontiac, Ills.

Punctuality is the mother of confidence. Be on time. Be frank. Say what you mean. Do what you say. So shall your friends know and take it for granted, that you mean to do what is just and right.

John Briggs.

Be honest, be temperate and never gamble.

John Jacob Astor.

Cut short your losses, and let your profits go on.

Ricardo's Rules.

He that has never known adversity, is but half acquainted with others, or with himself, for constant success shows us but one side of the world.

Colton.

What though you have found no treasure, nor has any rich relation left you a legacy. Diligence is the mother of good luck, and God gives all things to *industry*. Then plough deep while the sluggard sleeps, and you shall have corn to sell and to keep. Work while it is called to-day, for one to-day is worth two to-morrows.

Franklin.

Make a bargain at once. Be an off-hand man. Be cautious and bold.

Rothchild's Business Rule.

Until men have learned industry, economy and self-control, they cannot be safely intrusted with wealth.

John Griggs.

When I caution you against becoming a miser, I do not therefore advise you to become a prodigal or a spendthrift.

Horace.

The way to gain a good reputation, is to endeavor to be what you desire to appear.

Socrates.

You may depend upon it, that he is a good man, whose intimate friends are all good.

Lavater.

Actions, looks, words, steps, form the alphabet by which you may spell "character."

Lavater.

The best rules to form a young man are, to talk little, to hear much, to reflect alone what has passed in company, to distrust one's own opinions, and value others that deserve it.

Sir William Temple.

Deliberate with caution, but act with decision, and yield with graciousness, or oppose with firmness.

Colton.

This above all — to thine own self be true,
And it must follow, as the day, the night,
Thou canst not then be false to any man.

Shakespeare.



HOW TO WRITE.

A Complete Set of Rules for Position and Practice.

1. Sit in an upright and easy position. It will add to the ease and beauty of your writing. *Keep both feet on the floor.*
2. Hold the pen firmly, but not so tightly as to cramp the fingers.
3. Place the hand on the paper so the top of the holder will always point over the right shoulder. This will cause the points of the pen to press equally on the paper.

4. Keep the wrist from touching the paper or desk, and keep the thumb from bending while writing. Avoid the finger movement. It is not practical.

5. Let every downward stroke of the pen be drawn towards the center of the body, and the writing will have the correct slant.

6. Never practice carelessly. Always practice with a free and quick stroke. Let the movement be bold, free, offhand, resting the pen so lightly that the arm, hand and fingers can move freely together.

7. In making the shades, press on the pen with a gentle, springing movement. It will avoid heavy and irregular strokes.

8. Heavy shading, or shading every downward stroke, never adds beauty nor grace to the writing.

9. The thoughtful student in penmanship, as in other studies, will win. Think and write. Practice with perseverance, and your success will be certain.

10. To make the greatest improvement in the shortest time, practice upon the letters separately until you can make them all correctly.

11. Flourishes, too heavy shading, too large or too small letters, should be carefully avoided.

12. Practice writing by copying business letters, notes, drafts, receipts, etc., and you will improve your knowledge of business as well as your penmanship.



CORRECT POSITION OF THE PEN.

the
the
will
the

Business Writing

The business interests of the country demand that writing should be constructed in a manner consistent with speed and legibility—with little shade and no flourish.

PRACTICAL BUSINESS CAPITALS AND
COMBINED SIGNATURES.

A B C D E F G
H I J K L M N O
P Q R S T U V W
X Y Z &c.

J. Smith J. Smith.

J. B. Williams.

C. H. Ravens.

Business Alphabet.

A B C D E

a b c d e f g h i

J K L M N O

j k l m n o p q

R S T U V

r s t u v w x y z

P Q R S T U

V W X Y Z

Capital Letters.

A B C D

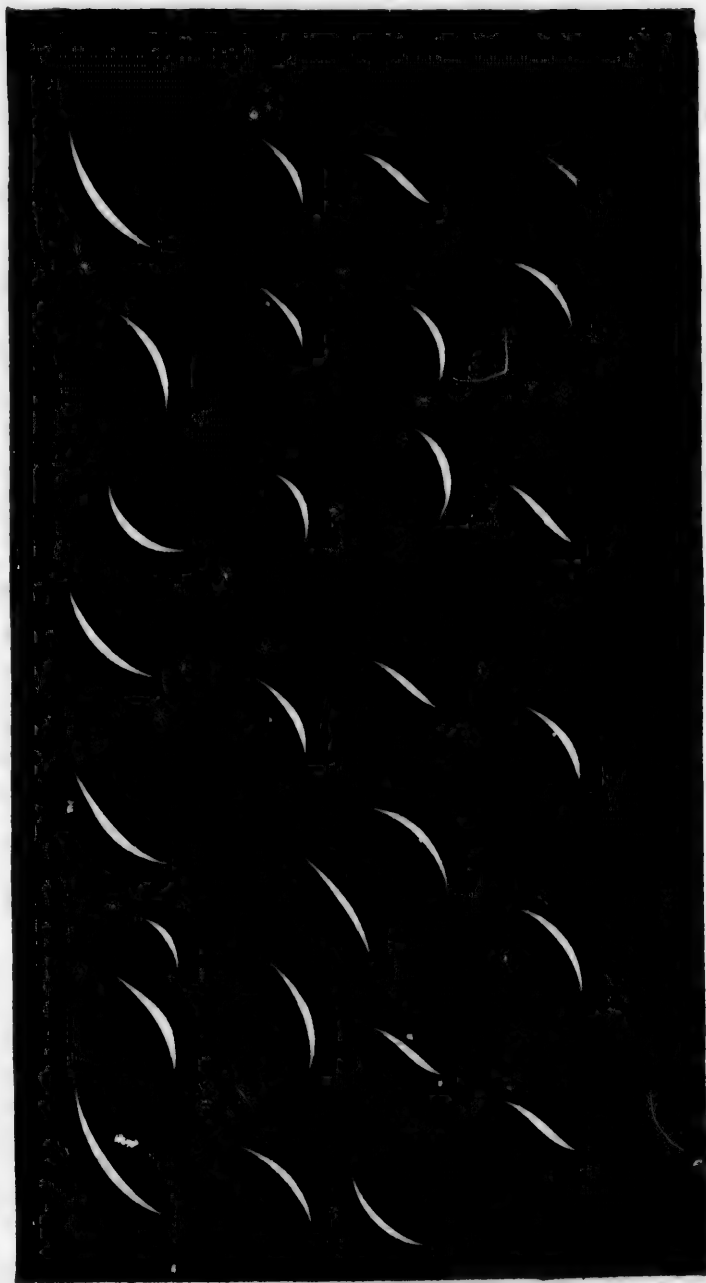
E F G H

I J K L

M N O P

Q R S T

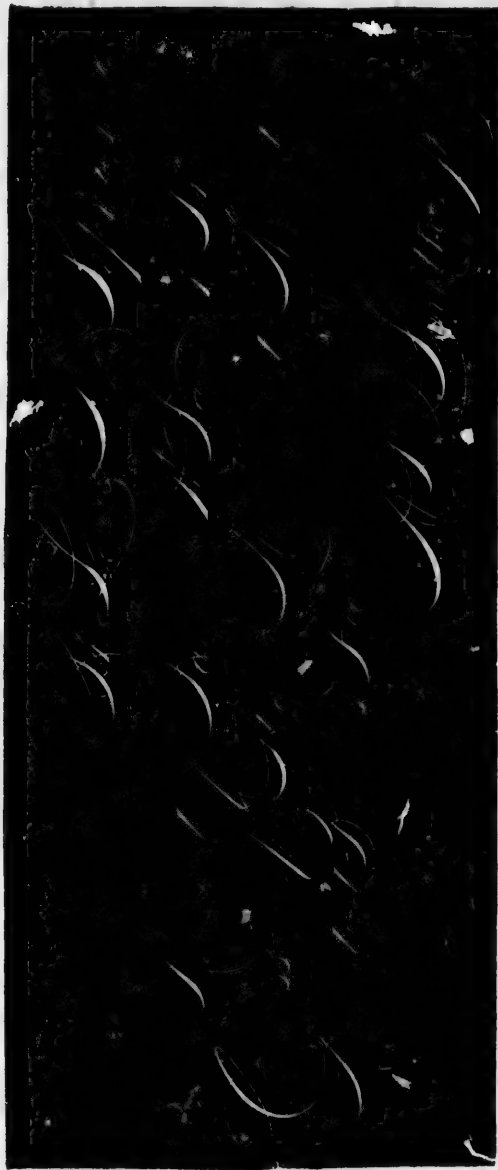
U V W Y





Italian Capitals

ORNAMENTAL WRITING.



Philadelphia Canada Syracuse. N.Y.

Canada Syracuse. N.Y.

FORM OF A DRAFT.

25

A DRAFT.

\$720 ⁵⁰/₁₀₀

Austin, Texas, Sep. 24, 1889

At ten days sight pay to the
order of Kate Burk, Seven Hundred
Twenty and ⁵⁰/₁₀₀ Dollars. Value received
and charge to account of

Henry M. Cutter.

To M. A. Reynolds
Albany, N.Y.

Receipt and Due Bill.

\$72.⁰⁰/₁₀₀

Denver Colo. Sep. 21, 1889
 Received of Samuel Price, Seventy-
 two Dollars, in full of all demands.
 W. R. Forver

\$600.⁰⁰/₁₀₀

Chicago, Sep. 21, 1889
 Due Robt. Nelson, or order, on
 demand Six Hundred Dollars
 D. M. Voshung

L. M. Cushing

MODEL OF RECEIPTED BILL.

27

Chicago Sep. 21 1889

Mr. Wm. Wells,

Bought of Saml. Cook,

Terms

Sep. 1	2 doz. Shardless Bags	31 ¹¹	744	
.	4 lbs. Brown Sugar	7 ¹¹	28	
.	166 . Rice	5 ¹¹	30	
	Received Payment,			802
	Saml. Cook.			

St. Paul, Minn., Jan 6. 1891.
Goodnow & Simpson,

21 State St. Chicago

Please deliver to the bearers
"Household Guides" and
one dozen copies
charge the same to the account of

W. H. Gamertsfelder

\$700 50/100

Mt Vernon, Ia. Feb. 12, 1891.

Received of Samuel D. Trummel
by the hand of George Ames Seven hundred
and 50/100 Dollars in payment of services
rendered the said Samuel D. Trummel.

J. C. Westry

Exercises in Ornamental Penmanship.





Montreal, Oct. 7, 188-
Ed and Trout, Esq.,
Toronto, Ont.

Dear Sir:

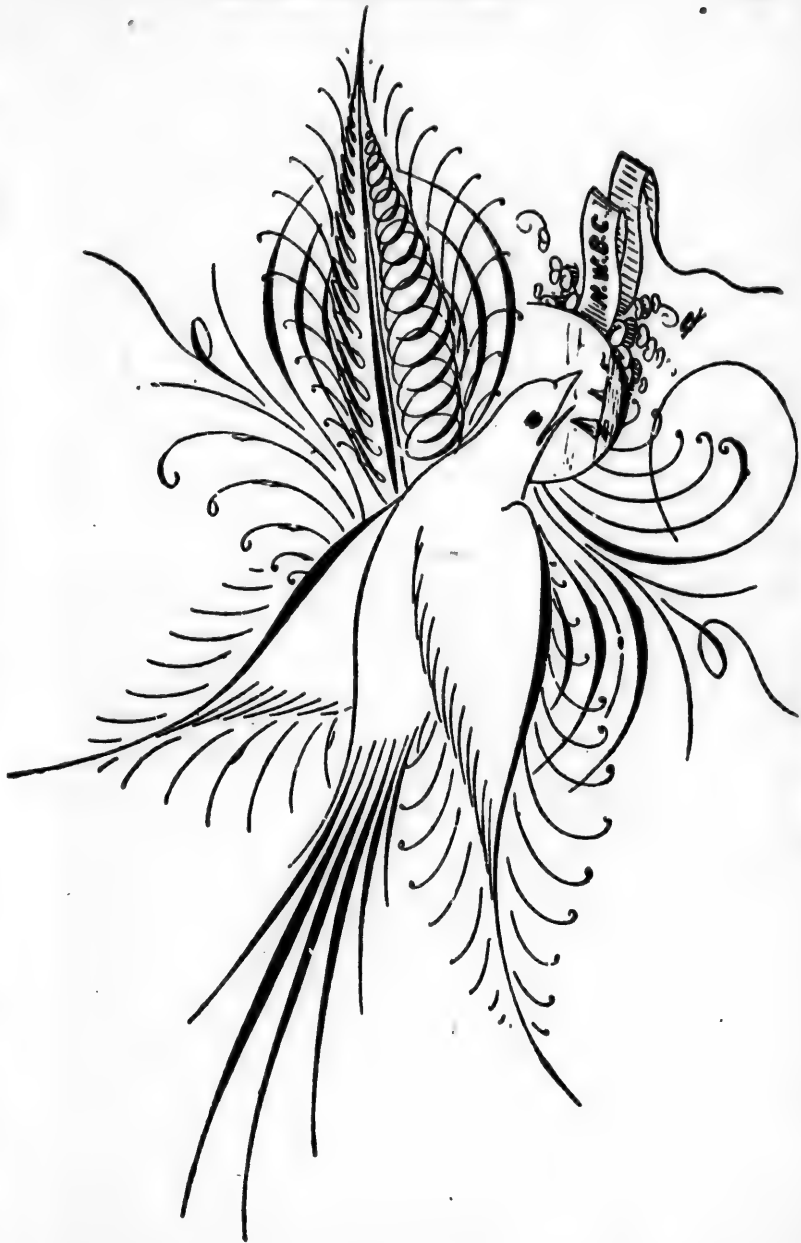
Enclosed find twenty
three dollars (\$23.⁰⁰) in full of my
account. Please acknowledge and
oblige

Respectfully yours,
Robt. Brown.



Connor O'Lea, Esq.,
Toronto,
Ont.

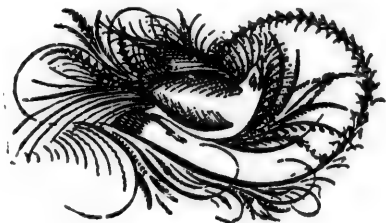
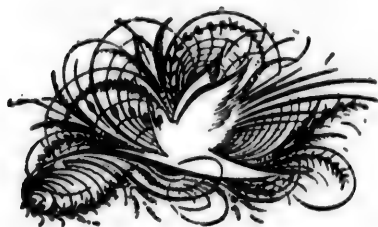


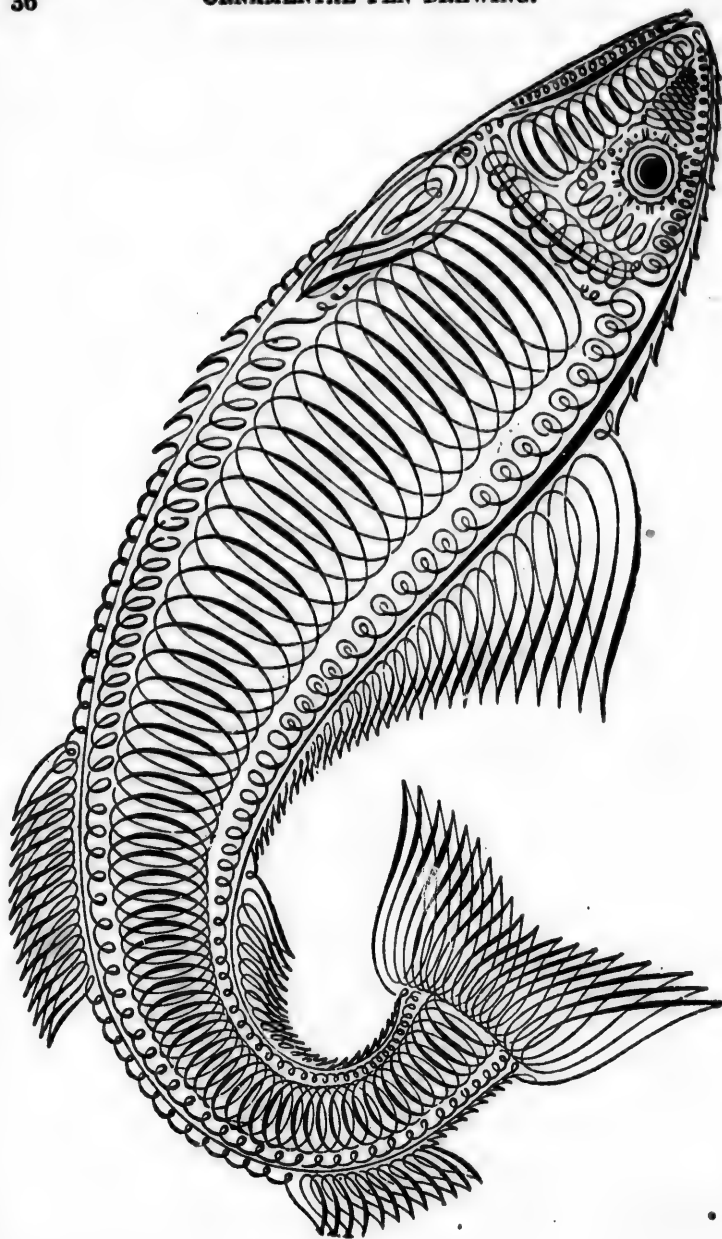


ORNAMENTAL PENMANSHIP.

Handwritten cursive text, partially visible on the left margin.









ALPHABET FOR MARKING BOXES AND PACKAGES.



A B C D E F G H I J K L M N

O P Q R S T U V W X Y Z &

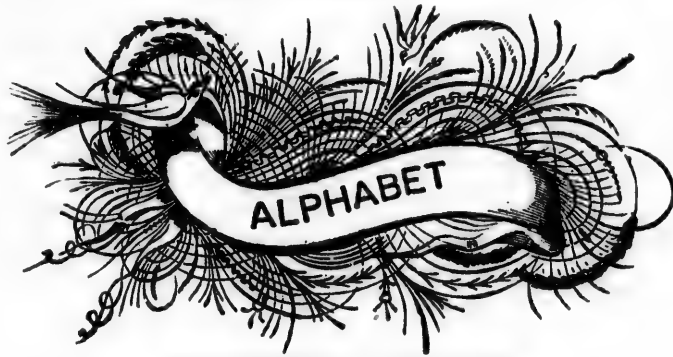
a b c d e f g h i j k l m n

o p q r s t u v w x y z

abcdefghijklmnopqrstuvwxyz

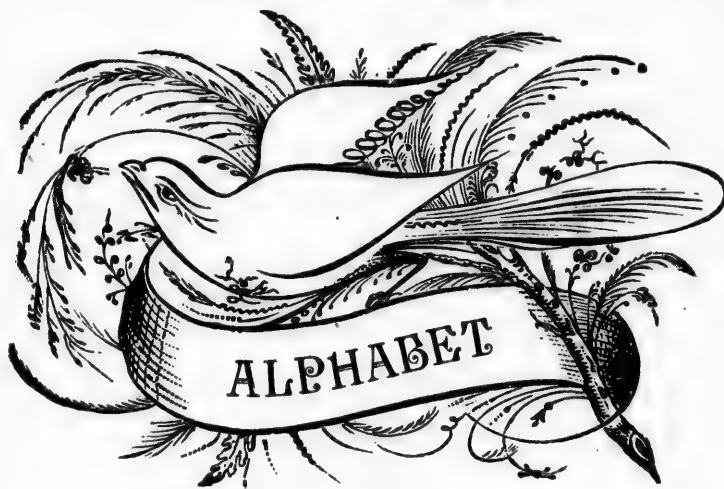
Selling Goods Card Marking

At Cost For Packages



FOR GERMAN WRITING.

A B C D E F G
 H I J K L M
 N O P Q R S T
 U V W X Y Z
 a b c d e f g h
 i j k l m n o p q
 r s t u v w x y z



For Pen Printing.

A	B	C	D	E	F	G
H	I	J	K	L	M	N
O	P	Q	R	S	T	U
V	W	X	Y	Z		
a	b	c	d	e	f	g
h	i	j	k	l	m	n
o	p	q	r	s	t	
u	v	w	x	y	z	

N. B.—Pen-printing as an exercise adds greatly to the improvement in penmanship.

1.
2.
3.
4.
5.
6.
7.
8.
9.
10.

SHORTHAND ALPHABET.

BY D. P. LINDSLEY.

THE MOST SIMPLE AND RAPID SYSTEM IN USE.

1	||	lllyll	11	/ /	✓✓✓✓✓
2	— —	— — — —	12	✓	✓✓✓✓✓
3	\\	lyllly	13	✓✓	✓✓✓✓✓
4	— —	— — — —	14	— —	✓✓✓✓✓
5	) )	lyllly	15	— —	✓✓✓✓✓
6	( (	lyllly	16	— —	✓✓✓✓✓
7	— —	— — — —	17	— —	✓✓✓✓✓
8	~ ~	lyllly	18	— —	✓✓✓✓✓
9	— —	— — — —	19	— —	✓✓✓✓✓
10	~ ~	lyllly	20	— —	✓✓✓✓✓
			21	— —	✓✓✓✓✓

KEY TO THE ABOVE.

LETTERS.		KEY WORDS.		LETTERS.		KEY WORDS.	
1. Be, Pe.	Bay, pay, babe, pap, bib, pip.	11. Ray, Ar.	Ray, air, are, oar, dare.				
2. De, Te.	Add, at, did, dead.	12. Wa, Wha.	Way, woe, why, whey.				
3. Ga, Ka.	Gay, ache, gag, gig, cake, kick.	13. Ha, Ya.	Hay, ho, yea, you.				
4. Ja, Cha.	Age, each, jig, chik.	14. A, Ai.	Ape, aid, air, fade, fair.				
5. Ve, Ef.	Eve, view, fee, five, fife.	15. At, Ah.	At, are, back, far.				
6. Zhe, Ish.	Azure, rouge, she, show, shoe.	16. E, Et, It.	Eat, egg, it, ill.				
7. Ze, Es.	Oose, owes, see, say.	17. Oo, oot.	Food, fool, foot, full, boom				
8. The, Ith.	The, they, oath, thaw, thy.	18. O ut, O ut.	Bow, bone, coat, cut, but.				
9. En, Ing.	Nay, an, thing.	19. Au, ot, or.	Caught, cot, or, on.				
10. Em, El.	Me, aim, lay, lee, eel.	20. I. U.	Buy, ice, die, dew.				
		21. Ol, Ow.	Coin, noise, how.				

FIVE RULES FOR SPELLING.

[There is a great variety of rules for spelling, but most of them have so many exceptions as to be a hindrance rather than a help.

The following rules have few or no exceptions, and may therefore aid the learner.]

RULE I. Verbs of one syllable, ending with a single consonant, preceded by a single vowel, and verbs of two or more syllables, ending in the same manner, and having the accent on the last syllable, double the final consonant whenever another syllable is added; as *get*, *get'ting*; *omit*, *omit'ted*.

RULE II. The plural of nouns ending in *y*, when *y* is preceded by a consonant, is formed by changing *y* into *i* and adding *es*; as, *lily*, *lil'ies*. When *y* final is preceded by a vowel the plural is formed by adding *s*; as, *valley*, *val'leys*.

RULE III. Nouns ending in *o* preceded by another vowel form their plurals regularly by adding *s* to the singular; as, *cam'e o*, *cam'e os*.

RULE IV. Words formed by prefixing one or more syllables to words ending in a double consonant retain both consonants; as, *be fall'*, *re buff'*. The exceptions are, *with al'*, *an mul'*, *dis til'*, *in stil'*, *ful fil'*, *un til'*.

RULE V. The word *full*, used as an affix, always drops one *l*; and its compounds, thus formed, make their plurals regularly by adding *s* to the singular; as, *hand'ful*, *hand'fuls*; *spoon'ful*, *spoon'fuls*.

THE USE OF CAPITALS.

1. Every entire sentence should begin with a capital.
2. Proper names, and adjectives derived from these, should begin with a capital.
3. All appellations of the Deity should begin with a capital.
4. Official and Honorary Titles begin with a capital.
5. Every line of poetry should begin with a capital.
6. Titles of books and the heads of their chapters and divisions are printed in capitals.
7. The pronoun, I, and the exclamation, O, are always capitals.
8. The days of the week, and the months of the year, begin with capitals.
9. Every quotation should begin with a capital letter.
10. Names of religious denominations begin with capitals.
11. In preparing accounts, each item should begin with a capital.
12. Any word of special importance may begin with a capital.

PUNCTUATION.

Punctuation is a valuable art, easily acquired, yet too frequently neglected by a vast majority of letter-writers. Business men, as a class, seem to despise points as something beneath their notice. Others omit to punctuate through ignorance or carelessness. This is a great mistake, and many mistakes are made on account of this almost universal neglect to give more attention to punctuation.

IMPORTANCE.

Punctuation is very closely connected with the construction of sentences ; so closely that a clear expression of thought in writing is almost an impossibility without it.

Many illustrations might be given to show the importance of punctuation. A young man writing to a friend, says: "I was married last Sunday night for the first time in five years ; the church was full." He intended to say : I was married last Sunday night ; for the first time in five years the church was full.

We give another, where both the spelling and the punctuation are defective. A clergyman one Sunday morning received a note from a parishioner, which, in the haste, he read as written, thus :

"Capt. John Smith having gone to *see* his wife, desires the prayers of the church for his safe return." The note should have been written: Capt. John Smith having gone to *see*, his wife desires the prayers of the church for his safe return.

These examples strikingly illustrate the importance of punctuation. And while they are of a simple and ridiculous character in a social sense, in a business letter they might be of very grave importance.

General rule : Punctuate where the sense requires it.

HOW TO WRITE A POSTAL CARD.

1. A card should be dated either on the upper right-hand corner, or on the lower left hand corner.
2. The writer's full name should be signed to it.
3. If an answer is required, the writer's full post-office address should be given, unless it is well known by the person to whom the card is directed.

4. Important matters should not be entrusted to a postal card, as it is open to inspection, and as the law does not provide for its return to the writer in case of failure to reach its destination. Nor is it allowable to use postal cards for notes of invitation, etc., in which society prescribes certain polite forms to be observed.

5. Never write a demand or request for money on a postal card. It is disrespectful to the person receiving it.



How to Improve Your Penmanship in Letter Writing.

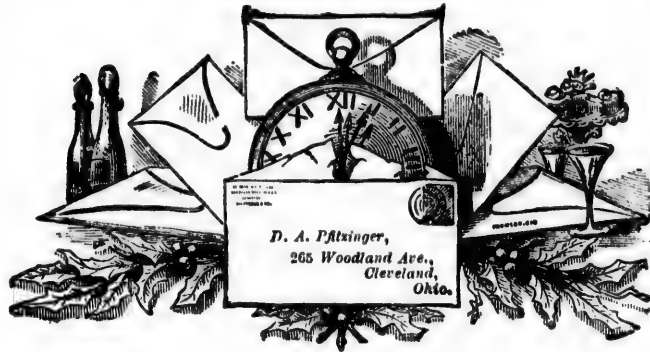
1. Never be satisfied with mere legibility; for neatness, elegance and correctness are equally important.

2. Remember, carelessness and too much haste not only fail to improve your penmanship, but actually ruin what progress already attained.

3. Many persons write letters so hurriedly as to slur over the words, half forming and deforming many of the letters, or making sort of a wavy line to represent a word; this is not only an injury to the writer, but vexatious, unsatisfactory and disrespectful to the reader.

4. Write plainly and neatly as possible, rapidly if you can, slowly if you must. A neat and well worded letter of one page once a month, is better than a slovenly scrawl of four pages once a week.

5. When persons contemplate having a photograph taken, they often bestow much care upon their personal appearance, in order to heighten the effect of the artist in the presentation of their physical likeness. These same persons, however, will often sit down and write hurriedly an important letter, that from undue haste abounds in blots, illegible writing, erasures, bad spelling, and the wrong use of capital letters; without once thinking they are transmitting to their correspondent a kind of mental photograph of themselves, drawn by their own hand, and one, too, which better indicates their fitness for business or for society than the others.



How to Write a Business Letter.

1. In business letters use as few words as possible.
2. Business letters should be promptly answered.
3. Never use flourishes in a business letter or a business paper.
4. Never discuss or refer to social matters in a business letter. If necessary write two letters.
5. Always use black ink.
6. Give town, county, State and date, for it is frequently of great importance.
7. Read your letter carefully when written, and see that you have made no omissions and no mistakes. Also examine carefully your envelope when addressed.
8. Copy important business letters and preserve them.
9. In writing to others for information, a stamp should always be enclosed.
10. When it becomes necessary to request payment, it should be done in the most gentlemanly terms. There is more loss than gain in rash and insulting language.
11. In writing to a stranger, he is addressed as "Sir," or "Dear Sir." "My Dear Sir" implies very friendly relation. A married lady is addressed as "Madam," or "Dear Madam," an unmarried lady as "Miss," or "Dear Miss," usually with her last name affixed. "Rev. Sir," for clergymen: "Esteemed Sir," for formal friends; Judges and legislative officers should be addressed by the title of "Honorable." In writing to a firm, company or a number of persons, the address is "Gentlemen," or "Sirs," or "Dear Sirs"

12. In sending money, the amount should always be mentioned. When sent by draft, check, etc., it may be written in figures.

13. Postscripts are indicative of thoughtlessness, and should be avoided, except when absolutely necessary.

14. Numbers except dates and sums of money should be spelled in full, unless exceeding three words in length.

15. Never use the character "&," except in the title of firms, as Jones & Smith.

16. A letter of introduction or recommendation should never be sealed, as the bearer, to whom it is given, should know the contents.

17. In reply, acknowledge first the receipt of the letter, mentioning its date.

18. Avoid erasures or blots, even if compelled to rewrite the whole letter.

19. Avoid writing a letter with a lead pencil, and never write others than a business letter on a half sheet of paper.

20. Properly punctuate the letter, and be especially exact in placing the proper punctuation marks on the address of the envelope.

21. The repetition of the same words, should be carefully guarded against.

22. Use contractions and abbreviations very sparingly.

23. Letters of application should be very carefully written in the applicant's own hand writing, modest but self-respectful.

24. Never address a party in a letter or on an envelope by using both Mr. and Esq., only one is admissible.

25. Never write a letter on foolscap paper.

26. Gentlemen should always use white paper, ladies may use delicately tinted and perfumed paper.

27. Both paper and envelopes should be of fine quality. Envelopes should match the paper.

28. Letters as well as other compositions should be divided into paragraphs, and a blank margin should always be left on the *left-hand* side of the page, and not on the right.

29. Always leave a *margin* of a half inch or more at the left of the page. The margin should correspond to the size of the paper.

30. Letters or papers prepared for the press should be written only on one side.

31. The closing words of respect, friendship, etc., should be, Yours truly, Yours respectfully, Yours very sincerely, Respectfully yours, Yours ever, Your affectionate brother, Your loving daughter, Your obedient servant, etc., etc. A great variety is used.

32. Do not use big words or high sounding terms. Be simple in style, for simplicity is the one thing that cannot be ridiculous.

33. When testimonials are required, and you desire to preserve the original, a copy should be enclosed, and marked "copy" at the top of the page.

34. It is almost useless for a poor writer to apply for a situation in a business house, for merchants do not wish either the discredit or the inconvenience of bad writing.

35. Fold the letter neatly, and fit to the size of the envelope, for a carelessly written and clumsily folded letter denotes either ignorance or a want of proper respect to the person addressed.

36. Business letters often partake of the nature of contracts, and mistakes, omissions, or ambiguous language often results in serious loss.

37. A Letter of Congratulation — Is a letter written to a friend who has met with some special good fortune or great joy. It should be written in a style suited to the occasion, lively, cheerful and free from all envy or prejudice.

38. A Letter of Condolence — Is a letter written to some friend who has suffered some grievous loss or bereavement. It should be consoling, comforting and full of sympathy.

Avoid calling up the harrowing details of the sad event, and do not attempt to argue the sufferer out of his (or her) sorrow.





HOW TO BEGIN A LETTER.

THE HEADING consists of place and date. In a city the number and street, city and state should be given. If the city is very large, such as Chicago, New York, Philadelphia, etc., the state need not be given.

Anyone writing from a large school, a college, a hotel, or any well known institution, generally writes the name of the institution with the place and date following. (See Form 5.)

ARRANGEMENT.—The first line on ruled paper is generally about an inch and a half below the top of the page. A letter should never begin much higher than that; but if the letter should be very short, it may begin still lower, so that the spaces above and below the letter would be about equal.

PUNCTUATION.—Always punctuate the parts of the heading as shown in the models.

THE ADDRESS consists of the name, title and residence (Post Office) of the persons written to.

SALUTATION is that term of politeness and respect with which we begin a letter; such as Sir, Dear Sir, Dear Friend, etc. In writing to a firm Sirs or Gentlemen should be used. Never use the abbreviations of "Gents" for Gentlemen or "Dr." for Dear or "Sr." for Sir.

Always state the most prominent part of your letter first.

Models for Beginning Letters.

FORM 1.

Montreal, Sept. 12, 1893.
Messrs. Hall & West,
58 Main St.,
Austin, Minn.
Gentlemen: Your favor of
8d inst. at hand, etc.

FORM 2.

Naperville, Du Page Co., Ills.
Nov. 25, 1890
Mr. F. J. Nichols,
Ottawa, Ills.
My Dear Sir: Please send by return
mail, etc.

FORM 3.

229 Madison St., Chicago,
Sept. 12, 1890.
Mrs. Maggie Smith,
Dear Madam.
Accept thanks for
the kindness you have shown me, etc.

FORM 4.

Cedar Falls, Iowa.
Monday, Sept. 26, 1890
Miss Nellie Reynolds,
Scotland,
Conn.

We acknowledge with
pleasure the receipt, etc.

FORM 5. (SOCIAL FORM.)

North-Western College,
Kaperville, Illinois,
Sept. 20, 1890.

Dear Friend.

Your welcome letter arrived
to-day, etc.

OTHER FORMS OF INTRODUCTION.

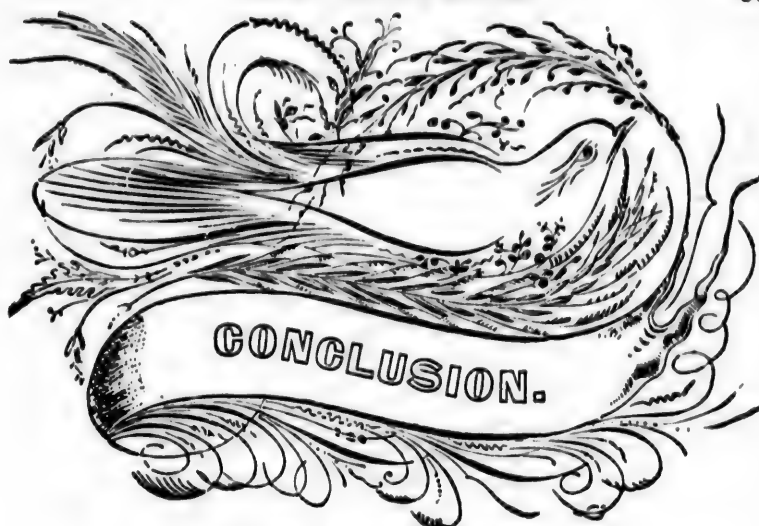
Rev. J. A. Meyers,
Upper Sandusky, Ohio.
My Dear Sir:

To the Editor of the Tribune,
New York.
Sir:—

To the Secretary of the Board of Education,
Madison, Wis.
Dear Sir:

F. Bickle, Esq.,
Fairmount, Minn.
Respected Friend:

NOTE.—The address is sometimes written at the close of a letter.



HOW TO CLOSE A LETTER.

1. Never write a letter without signing it, and write your name in full if the letter contains important matter.
2. Write your name plainly. Bad signatures often cause great inconvenience, and many times result in very serious mistake.
3. If a lady is writing to a stranger, she should sign her name with her proper title, Miss or Mrs.
4. The complimentary close is written on the next line below the closing sentence, and the signature is written on the next line below the complimentary close.

MODELS FOR CLOSING.

COMMON FORMS.

Yours truly,
M. M. Matter.

Yours very truly,
Miss Kate Rourke.

I remain,
Yours respectfully,
J. C. Zehnder.

Sincerely yours,
Mrs. A. S. Barnard.

FORMS WITH ADDRESS.

Please address,
B. F. Simon,
West Salem, Ohio.

I am,
Yours truly,
B. M. Worthington.

To C. M. Smith,
Berlin, Ont.

We remain, dear Sir,
Your obedient servant,
C. W. Field.

Please direct to
N. W. B. College,
Naperville, Ills.

HOW TO ADDRESS AN ENVELOPE.

*Messrs. Wicks & Nichols,
No. 17 Monroe Street,
Ottawa,
Canada.*

1. In writing the superscription, commence the name a little to the left of the center of the envelope. The *town* on the line beneath, and should extend a little to the right of the name. The *State* next below, should stand by itself, still further to the right. The *county* may be on the same line with the State, towards the left side of the envelope.

2. The county may be omitted where the town is a large metropolis.

3. Great care should be exercised in addressing letters. Give the full name and title of the person addressed. From the neglect of this precaution, thousands of letters are sent every month to the dead-letter office.

FORMS OF SUPERSCRPTIONS.

*Henry Lee,
Woodbury, N. Y.
Gloucester Co.*

*J. R. Price, Esq.,
Philadelphia,
104 Chestnut St. Pa.*

*Peter Thompson, Esq.,
Pres. of the Board of Education,
Naperville, Ills.*

Springfield, O., June 18, 1882
Messrs. W. Bell & Co.,
Cincinnati, O.

Gentlemen, — In reply to your letter of the 9. inst. relative to knowledge of Mr. W. Turner who was in my employ as bookkeeper for upwards of seven years.

During that time his conduct was such as not only to win for himself the good wishes and respect of all with whom we had business relations, but by strict attention to his duty, his punctuality, and above all by his integrity, so won my esteem, that no considerations could have induced me to part with him.

Serious illness alone causing him to resign the position he held.

Truly yours,
W. R. Graham.



COMMERCIAL CORRESPONDENCE.

HOW TO WRITE A LETTER OF INTRODUCTION.

Toronto, Ont., Oct. 7, 1892.

Dear Sir: This will introduce to you my friend, F. D. Vincent, of this city. He intends staying a few days in your place, which he visits on business, and I take the liberty of recommending him to your kind attention.

He is a gentleman of excellent acquirements, and I know him to be responsible to the extent of his engagements. Any attention or favor that you render him will be considered a personal favor, which I shall be happy to reciprocate.

Very sincerely yours,

Chas. M. Hunter.

To Jared L. Marton, Esq.

Recommendation to a Young Man

TO WHOM IT MAY CONCERN.

This is to certify that the bearer, Mr. S. G. Auer, has long been known to me, and that he is a young man of good family, steady habits, and honest and conscientious in the performance of every duty.

He sustains an excellent reputation among his associates and neighbors. He is highly respected by all, and is possessed of a good education. We take pleasure in recommending him to any who may desire the services of an active, competent, and trustworthy young man.

J. A. WEIS.

A Tenant's Complaint.

Mr. G. J. STECHER,

Upper Sandusky, Ohio.

Marseilles, Ky., March 12, 1891.

Dear Sir:—Some time ago I called your attention to the condition of the house, for which we are paying a liberal rent. The drainage is in a bad condition, one of the chimneys is very defective, a large portion of the plastering from the ceiling in the north room has fallen down, and we are suffering continual annoyance owing to the bad condition of the house and premises. I trust it will not be necessary to notify you again that these things demand immediate attention. They must be remedied, or we shall be compelled to look elsewhere for another house.

Yours very truly,

ANNA HOLVERSON.

A Parent's Excuse to a Teacher.

MR. S. T. SMITH,

Will you please excuse my daughter Grace for non-attendance at school yesterday? She was detained on account of sickness.

Very respectfully,

MRS. F. J. DAVIS.

A Resignation.

TO THE DIRECTORS OF THE JOLIET LOAN ASSOCIATION.

Gentlemen:—I herewith tender my resignation as secretary of your association, for reasons not altogether unknown to you. Same to take effect on the 15th day of April next.

Respectfully yours,

March 10, 1891.

J. L. STROHM.

Apologizing for Failure to Pay Money Promptly.

Mr. J. K. WEST,

Aurora, Ill.

Memphis, Jan. 14th, 1891.

Dear Sir:—I must really beg of you to defer the settlement of your account till after the middle of next month, when I shall be in a condition to meet your demand. Regretting that circumstances prevent my being more prompt in attending to your wishes,

I remain, Sir,

Yours very truly,

A. M. WINTERS.

Requesting Payment.

Messrs. DOUGLAS & HEARTH,

St. Louis, Mo.

Naperville, Ills., Oct. 31, 1891.

Dear Sirs:—We are obliged again to ask you for the balance of your account, now four months past due. We are much inconvenienced by your delay, and have waited longer than we think ought to be expected. The account must be speedily settled, and, if we do not hear from you by the 15th inst., will draw on you, at five days' sight. If the draft is not protected at maturity, we shall be compelled to adopt some other mode of settlement.

Yours truly,

ANDREW JAY.

Application for a Situation as Book-keeper.Messrs. K. K. LANGTON & CO.,
Cincinnati, Ohio.

San Jose, Cal., Feb. 20, 1891.

Gentlemen:—Having learned from Prof. George Sindlinger that you desire the services of a book-keeper, I respectfully offer myself as an applicant for the situation. I have been engaged for two years in the wholesale house of Geo. Reuss & Co., as clerk and assistant book-keeper, and have a good knowledge of accounts. My business acquaintance is extensive in the western part of Kentucky, and I could therefore influence considerable trade. I enclose copy of testimonial from my late employers, and would also respectfully refer you, as to my character and ability, to

Messrs. S. A. Welty, Banker, Creston, Ia.,
W. Scott & Co., Merchants, Naperville, Ill.

Any communication which you may be pleased to make, addressed as above, will receive prompt attention.

Very respectfully yours,

F. T. GEIST.

Recommendation enclosed in the above copy.

San Jose, June 10, 1891.

The bearer, F. T. Geist, has been in our employ as assistant book-keeper for over two years, and we have always found him to be honest, steady, and correct in his habits and deportment, and well qualified for any position of trust in a counting-house. We cheerfully recommend him as a competent book-keeper and one who will earnestly apply himself to promote the interests of his employers.

Respectfully,

L. F. WENTZEL & CO.

A Student at School.

North-Western College, Oct. 2, 1891.

My dear Parents:—It will doubtless give you much pleasure to learn that owing to the kind attention of my teachers I have made so satisfactory a progress, that I have not only been promoted one class higher in the school, but have carried off the first prize in penmanship.

I sincerely hope that I may keep up to all the expectations you have formed of me, and which you have spared no pains or expense to realize.

With feelings of regret at leaving my kind teachers and school-mates, and delight at the prospect of my return home, I remain, my dearest parents, with kindest love to all at home,

Your affectionate child,

ELMER WICKS.

Application for a Catalogue.

Dover, Del., Aug. 3, 1891.

President THOMAS BOWMAN,
Naperville, Ill.

Sir:—Please send me a copy of your last catalogue and circular. I design attending school next winter, and wish to obtain information concerning your terms, course of study, etc. By complying with the above request you will oblige,

Yours, very respectfully,

M. H. SIGNOR.

Advertisement.

Wanted — A young man of ability to fill the position of entry-clerk in a dry goods house. One who has had some experience in dry goods business preferred.

Address with reference, X. L. M., Box 1024, P. O.

Replies.

Mr. X. L. M.

St. Louis, Aug. 9, 1891.

Sir: Consider me an applicant for the position advertised in to-day's Tribune. Am twenty-two years of age, have not handled dry goods, but am thoroughly conversant with the technical terms, abbreviations, and calculations pertaining to the business, having completed a commercial course at North-Western Business College, Naperville, Ill., the professors of which I am at liberty to use as parties of reference.

Respectfully,

E. B. BALDWIN.

Another Answer to an Advertisement.

A. M. BAKER & CO.,

Schuylkill, Pa., Oct. 7, 1891.

Lemont, N. Y.

Gentlemen:—In answer to your advertisement in the "Times" of to-day, for an assistant in your counting-house, I respectfully offer my services to your firm. I am without experience in business, but have a desire to enter mercantile life, am willing to work, and have just graduated from our city High School.

If you will give me a trial, I will devote myself to your interests and endeavor to acquit myself to your entire satisfaction. For reference as to my character or ability, I would offer the names of

Mr. GEORGE H. BANER, Fargo, Dak.

Mr. GEORGE F. DIEGEL, Cleveland, O.

Should a personal interview be desired, please address as above.

Very respectfully,

J. W. WILLIAMS.

Letter of Recommendation.

Warren, Oct. 7, 1891.

To whom it may concern:—The bearer of this, Mr. J. M. Horton, has been in our employ for three years past as salesman and book-keeper, and we have ever found him diligent and faithful in the discharge of his duties, and one who endeavored to make his employers' interest his own. He is correct and reliable in his accounts, and is well qualified to act as book-keeper or correspondent.

We cheerfully recommend him to any who may require the services of a trustworthy and competent person as accountant.

Very respectfully,

MARSHALL, FIELD & CO.

From a young man commencing business, to a Wholesale House, with Order.

Racine, Wis., Aug. 15, 1891.

Messrs. WILLIARD, HATCH & CO.,

105 State Street, Chicago.

Dear Sirs:—Having recently commenced business for myself, with fair prospects of success, I shall be pleased to open an account with your house, and trust it will be to our mutual advantage. Should you think favorably of the matter, you will please fill the accompanying order with the least possible delay and on your best terms.

For testimonials, I refer you to J. R. Cramer & Co., of your city, by whom I have been, until lately, employed; but as this is my first transaction with your house, upon forwarding me an invoice of goods and deducting your usual discount for cash, I will remit a sight draft on the First National Bank of your city, for the amount, by return mail. Expecting prompt attention, I am,

Yours respectfully,

J. A. REUSS.

From a Boy applying for a Clerkship.

Messrs. A. S. KRIEBEL,

118 Madison Street, Chicago.

Chicago, Ills., Nov. 13, 1891.

187 Madison Street.

Dear Sir:—I notice in this morning's "Clarion" your advertisement of a boy wanted in a grain commission house; for which position I take the first opportunity to apply. I am fourteen years old, have been at school the most of the time, winters, for the past seven years, and understand book-keeping and conducting correspondence pretty well, having assisted my father much of the time while he was in the coal trade, which was about three years.

I am perfectly willing and ready to take my coat off and go right to work at handling grain or anything else in your line.

I refer you to Mr. George Beldon, Coal Dealer, at 65 State Street, Chicago, who has always known me.

I will board at home, and will try to earn for you Five Dollars a week.

Very respectfully, yours,

GEORGE ARNOLD.

Sending a Subscription to a Newspaper.

Warren, Warren Co., Pa., May 4, 1891.

To the Publishers of "COLLEGE CHRONICLE,"

Naperville, Ills.

Gentlemen:—You will find enclosed money order for One Dollar (\$1.00), for which you will please send to my address a copy of "The College Chronicle" for one year, beginning with the first number of the present volume.

Yours respectfully,

F. D. VINCENT.

Advising Receipt of Invoice.

Louisville, Ky., May 21, 1891.

Mr. JAMES L. KING,

Boston.

Dear Sir:—Your favor of March 29th, with Invoice, was received in due time. The goods are all that we desired; and for your promptness and care in filling our order, accept our thanks.

Enclosed find in payment Walker & Bros., Draft on First National Bank of Boston, at sight, for \$1950.25. Please acknowledge receipt per return mail, and oblige

Yours respectfully,

J. L. JONES & CO.

Sending Draft.

Naperville, Ills., March 11, 1891.

Messrs. S. A. MAXWELL & CO.,

134-136 Wabash Ave.,

Chicago, Ills.

Gentlemen:—Inclosed please find draft on Willard Scott & Co., Bankers, No. 12945, for \$89.77, in payment of Bill for Stationery, dated March 5, 1891.

Please acknowledge receipt, and oblige,

Yours respectfully,

J. LERCH.

Sending Receipt.

Naperville, Ills., Dec. 1, 1891.

Mr. ISRAEL GROSS,

Marion, Marion Co., Kans.

Dear Sir:—Your favor of Nov. 29, 1891, just received. Inclosed please find receipt. With thanks for your prompt remittance,

I am very respectfully yours.

J. LERCH.

Enclosing Note for Discount.

Annapolis, Jan. 14, 1891.

CHAS. W. WARD, Esq., Cashier.

Dear Sir:— We offer for discount, enclosed, L. Brown's note, Dec. 20th, at ninety days, for \$4,250.75. By discounting the same you will greatly oblige.

Yours respectfully,

C. E. SELBY & CO.

Ordering Books.

Naperville, Ills., Oct. 9, 1891.

Messrs. DOMBY & SON,
45 State Street,
Chicago.

Gentlemen:— Please send me, by American Express, as soon as convenient, the following books:

Clark's Commercial Law,	- - - - -	\$1.00
Longfellow's Poems,	- - - - -	2.00
Westlake's Practice Words,	- - - - -	.60
White's Arithmetic,	- - - - -	.80

When forwarded please notify me by letter the discount that I am entitled to, on the above books.

Very respectfully yours,

ADOLPH MEYER.

Requesting Settlement of Account.

Nashville, Tenn., Nov. 10, 1891.

EUGENE BURNS, Esq.,
Memphis, Tenn.

Sir:— I enclose your account. I shall feel obliged by your settlement at an early date, as I have several heavy payments to make. Trusting that you will excuse my troubling you, I am, respectfully,

WILLIAM GREEN.

Order for a Book.

Trenton, N. J., Nov. 6, 1891.

Messrs. JAY & MORRISON,
Poughkeepsie, N. Y.

Gentlemen:— Enclosed find Two Dollars (\$2.00), for which please send me two copies of "The Business Guide," and oblige,

Yours truly,

J. G. WOLF

Acknowledging Remittance.

New York, Oct. 12, 1891.

Received from Messrs. W. D. Wolf & Co., Five Hundred and Fifty 35
Dollars on account.

550. 35

H. D. SCHMUTZ & CO.

Asking a Loan.

Reading, Pa., May 28, 1891.

Dear Sir:— I write to ask you a rather disagreeable favor. A disappointment in the receipt of some money due has exposed me to a temporary embarrassment. Would you under these annoying circumstances accommodate me with a loan of Twenty Dollars until pay-day, when I shall be able to return it without fail.

It vexes me much to ask a friend such a thing, but you will, I hope, excuse it on the part of

Yours, most truly,

F. D. VINCENT.

To Mr. William Williamson,
Mendota, Ills.

Requesting Payment.

Buffalo, July 20, 1891.

Mr. M. B. FOSTER,
Yankton.

Dear Sir:—If convenient, please let us have the amount of your bill, March 15th, for \$225.50. We desire to close all our accounts by the 30th inst., and have need of all the funds due us. Please remit without delay, and much oblige,

Yours respectfully,

MILLER, JOHNSON & CO.

Requesting the Payment of a sum of Money.

Naperville, Ills., May 15, 1891.

H. M. SCHREPFER, Esq.,
Howell, Mich.

Dear Sir:—Although the balance of the account between us has been of long standing in my favor, yet I would not have applied to you at present, had not a very unexpected demand been made upon me for a considerable sum, which without your assistance, it will not be in my power to answer. When I have an opportunity of seeing you, I shall then inform you of the nature of this demand, and the necessity of my discharging it.

I hope you will excuse me this freedom, which nothing but a regard to my credit and family could oblige me to take. If it does not suit you to remit the whole, part will be thankfully received by

Your obedient servant,

D. E. HOOVER.

Urging Payment of Rent.

Peoria, Ills., Oct. 16, 1891.

Mr. D. P. COYL,
Troy, N. Y.

Dear Sir:—I have waited patiently for your convenience in the payment of the rent for the house you are at present occupying. As, however, you have now been my tenant for four months without meeting any of the payments, which were to be made monthly, I feel obliged to remind you of the fact that there are now \$80 due me.

Trusting that you will give the subject your immediate attention, I am,

Yours truly,

JAMES FOX.

Application for a School.

San Jose, Cal., Oct. 16, 1891.

JAMES MILLER, Esq.,
Secretary of School-Board,
Cincinnati.

Sir:—Having learned that there is a vacancy in your school, I beg leave to offer myself as a candidate for the position.

I graduated at the North Western College in 1889, and have since devoted myself to the work of teaching.

Enclosed you will find testimonials from J. K. Rassweiler, Esq., County Superintendent, and President Smith, former president of the above named institution; and I am also permitted to refer to Rev. T. Woodside and Hon. Tho's Brown of this city.

Should a personal interview be desired, I shall be glad to present myself at such time and place as may be most convenient to yourself.

I am, Sir, with much respect,

Your obedient servant,

WM. REINKE.

Order to a Store for Goods.

At Home, Feb. 10, 1891.

Mr. Counter :

Please deliver to the bearer, for me:

22 lbs. Dried Apples,

5 lbs. Best Rice,

\$1.00 worth of A Coffee Sugar,

1 bar Rising Sun Stove Polish

Charge the same to my account, and greatly oblige,

MRS. J. G. FARMER.

Ordering a Bill of Goods.

Adrian, Mich., Jan. 25, 1891.

Messrs. L. E. Fiant & Co.,

414 State Street, Chicago.

Gentlemen:—Please ship me at your earliest convenience, by Freight, per C., B. & Q. R. R., the following :

34 brls. Mess Pork,

20 brls. Coffee Sugar,

7 chests Japan Tea,

10 bags Rio Coffee,

3 mats Cinnamon.

Hoping to receive the above order of goods in good condition and without unnecessary delay, I am,

Yours truly,

F. J. TAGGART.

Recommendation for a Farm Laborer.

Sycamore, Ill., Nov. 1, 1890.

To whom it may concern:—

This certifies that the bearer, Jno. Jones, has worked for me during the last season upon my farm, and that I have found him steady, reliable, strong and a good workman. I recommend him to any one who wishes help that understands farming, as one who is able and willing to earn good wages.

LEE SCHAEFFER.

Letter of Introduction.

SHORT FORM.

Dear Friend:—I have the pleasure of introducing to your acquaintance Mr. W. N. Tarnutzer, whom I commend to your kind attention.

Very respectfully yours,

S. REIK.

To Rev. J. Miller,

Naperville, Ill.

Letter of Congratulation.

Naperville, Ill., Jan. 27, 1891.

My Dear Friend James:

Allow me to congratulate you on your marriage, of which I have just heard. With all my heart I wish you a long, happy and prosperous life with your helpmeet. May you share with each other many joys and few sorrows.

As ever your friend,

To J. A. Schneider,
Batavia, Ill.

EMIL VON BERGEN.

Letter of Condolence.

Reese, Mich., Jan. 7, 1891.

Dear Friend Clayton:

With feelings of deepest sorrow I have learned of your recent heavy loss. You have my sincere sympathy in this your affliction. With hope that you may speedily retrieve your loss, I am, as ever,

Your friend,

To S. H. Wolf,
Naperville, Ill.

R. R. BARNARD.

Letter of Credit.

Naperville, Ills., Feb. 4, 1891.

Messrs. Steiner & Leffler,
New York.

Dear Sirs:—Please allow Mr. J. A. West a credit for such goods as he may select to an amount not exceeding Eight Hundred Dollars (800.00) for four months. I will become responsible for the payment of the same should Mr. West fail to meet the obligation promptly.

Please inform me of the amount for which you give credit, and in default of payment notify me promptly.

Very truly yours,

I. J. HOUTFUEHRER.

(Mr. West's signature,
J. A. WEST.)

NOTE.—Letters of credit are of great benefit to persons traveling in foreign lands. It enables them to draw money from banks and brokers, and thereby avoid the risk of carrying large amounts of money about their person, and the annoyance of making frequent exchanges.



HOW TO APPLY FOR A SITUATION.

1. Fit yourself by securing a fair knowledge of Arithmetic, Geography, Grammar, United States History, Book-keeping, and master Penmanship sufficiently so as to write neatly and rapidly. Obtain a good commercial education in some reliable institution if you possibly can.

2. Secure a few letters of recommendation from your friends and prominent business men if possible.

3. Make up your mind what business you desire to follow and get a list of the best houses in this line, and then make preparation to apply.

4. Then put on your best clothes, see that they are neatly brushed, that your linen is faultless, your boots blacked, your hands and face clean, and your finger-nails properly trimmed.

5. Go to the best houses first. Walk directly to the office and ask for the proprietor. If he is not in or, is busy and cannot see you, say that you may call again and politely leave. Make a note of your call and then go to the next place on your list.

6. If you succeed in seeing the proprietor and are permitted to state your case, come to the point at once. Say that you are from Illinois (or whatever State you are from), and that you have been in the city for so many days, or weeks, as the case may be, trying to learn some things that may enable you to be helpful in a business house, and that you desire to try, wages no object; you are willing to demonstrate your fitness at whatever work they may have, no matter what it is.

7. If you are fortunate enough to gain the proprietor's confidence, so that he is willing to try you, be glad and ask him to give you any work he may have. If he has no work he will say so, and you bid him good-day and politely retire.

8. Before you go to the next place stop for a moment and consider first, that you made no failure in not securing a position, for the reason that it did not exist, and study carefully and see if you have not made any mistakes in your method of application.

9. Enter the next house with as much courage and confidence as you would if you were sure of a favorable reply. Adopt the same course as before, and if unsuccessful, remember that you and God hold the secret, and keep on in the same way. If in a large city, visit forty or fifty houses each day. Pluck and perseverance will win you a position, for many of our most prominent business men of to-day began by working long and hard in securing their first situation in the same way.

10. Remember that most of the prominent business men of to-day worked their own way up from the bottom, and they will have considerable sympathy for a young man who is starting out in life with nothing but an honest heart and willing hands.



If the parties are very intimate friends, the formal and ceremonious style may be dropped, and that of a familiar letter adopted, as in the following:—

Saturday Morning, May 10.

Dear Fanny,

We are going to Irving's Cliff this afternoon for wild flowers. Will you oblige us by making one of our little party? If so, we will call for you at two o'clock. Do go.

Yours affectionately,

Libbie.

Please answer by bearer.

My dear Sir,

If you can come next Sunday we shall be equally glad to see you, but do not trust to any of Martin's appointments in future. Leg of lamb as before, at half-past four, and the heart of Lamb for ever.

Yours truly,

20th June, 1892.

E. Lamb.



LADIES' DEPARTMENT.

A LADIES' LETTER WRITER.

New and Practical Rules for Ladies' Correspondence.

1. Letter writing is a department of literature in which ladies have borne the palm.
2. Young ladies should remember that a good letter, well written, well spelled, and well arranged, is always admired, no matter who the writer may be. Ability to write an intelligent letter is absolutely necessary to even a fair culture.

3. A poorly written epistle is always criticised and is never satisfactory, no matter what the contents may be.

4. Young ladies lose many opportunities to improve their spelling and grammar by neglecting the art of careful and prudent letter writing. A spicy, bright letter brings sunshine to both the writer and the reader.

5. Never mail a letter if you are in anywise ashamed of it on reading it over. Tear it up and try again. A thoroughly good letter always makes the reader wish there was more of it. The polished style cannot be acquired without toilsome attention previously given to the details. First be correct in spelling, punctuation, capitals, paragraphs, and grammar; it is safe to say that there are none who cannot do this. Then add to this ability, the thinking and the feeling power, and you will not only be able to write letters, but will begin to delight in literature.

6. Never flatter; be especially chary of compliments when writing to gentlemen; in all your converse let the title of sycophant be won by the man. Always say what you desire to say in a clear straight-forward way.

7. Write as you would talk. If you feel puzzled when you sit down to write as to what to say or how to say it, it is simply an indication that you need practice in writing. Select a few friends with whom you are on familiar terms; open up a correspondence with them, and after a few months of study and practice, you will find letter writing a pleasure instead of a task.

8. A well written letter has opened the way for usefulness to many a one, has led to many a happy, constant friendship, and has proved a life-long help.

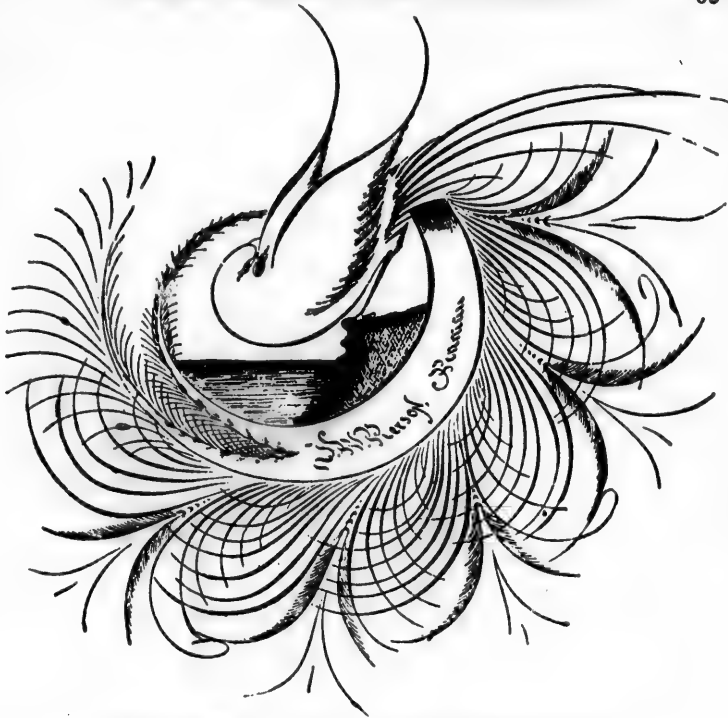
9. Letter Writers are of little benefit unless it be to give a general idea of form, such as opening and closing, etc. People

must write letters out of their own heads, and it is impossible to secure them manufactured or ready-made. A good letter must have head and heart in it. A copy cannot have the heart element; it is purely frigid. Besides, none but the illiterate would think for a moment of copying. Resolve, then, to be accomplished in writing. The practice of writing sentences on bits of paper, expressing your thoughts in different language, is an excellent exercise in the cultivation of this talent.

10. Thinking over the different subjects of which you desire to speak in your letter and arranging them in natural order is good practice. After selecting as many subjects as you desire to mention in your letter, write them carefully in a series of paragraphs in proper sequence, and you will find that your letter will be complete and interesting. Think your heart full and send it out through your pen.

11. When you desire to begin a letter to your friend, just consider what you would say if he or she were present, and the moment you have abstracted yourself the first words of greeting will pass through your mind, and then the inquiries will naturally follow. If you will cultivate the habit of tracing your thoughts when you begin you will soon have a natural, easy, and pleasant epistle for your correspondent to read.

12. A fitting caution is: Remember that it is possible for anything and everything written to find its way into print.



Asking for a Letter of Recommendation.

Toronto, Ont. June 15, 1892.

Will Mr. Hughes be so good as to favor me with a line, stating in what manner and with what success I discharged my duties while serving as a teacher in the school in which he is director. Such a testimonial, if as favorable as I have reason to expect, may be of great benefit to me in procuring a desirable situation as teacher.

*Hoping that Mr. Hughes will favor me with a reply as soon as convenient, I remain
his friend,*

Lulu Brown.

To Larry Hughes, Esq.

A Letter of Condolence on a Child's Death.

Ayton, Ont., June 10, 1892.

My Dear Friend:—If anything could have caused me especial pain, it was the news of your sad bereavement. How I remember your dear child! Lovely, lively, intelligent, and affectionate, ever displaying a thoughtfulness beyond her years, and to lose such a promising child truly brings a deep and heavy shadow; but remember that light sometime will break through, and there will be a glad and happy reunion in the great beyond.

It has, indeed, been a heavy blow, and I scarcely know how to talk of consolation under so bitter an affliction. But think of One who careth for us all and who loves little children. He has prepared a bright and beautiful home beyond the grave, and the spirit of the dear child will only wait a brief period when in sweetness and in love she will meet her mother and father to depart no more.

I can say no more; human consolation is weak. May God bless you in your hour of sorrow, is the wish of

Your loving friend,

M. Carrie Kettler.

To Mrs. Henry Craver.

Requests the Address of a Paper Changed.

Jersey City, N. J., June 23, 1891.

"*Ladies' Home Journal*,"

Philadelphia, Pa.

Gentlemen:—Please change the address of the "Ladies' Home Journal," from Mrs. Gertrude G. Goodrich, Naperville, Ills., to Mrs. Gertrude G. Goodrich, 45 Merrimac St., Tacoma, Washington, and oblige,

Yours very respectfully,

Mrs. Gertrude G. Goodrich



A Letter to a Lady Friend.

Ottawa, June 23, 1892.

Miss Nellie Reynolds,
Scotland, Conn.

Dear Friend :—It no doubt will be a great surprise to you to receive a letter from a distant friend who has been silent so long. I will venture to try to experiment, hoping you will recover from the shock in season to make an early reply.

How has the world prospered you all these long years since we last met? I hope you are in the full enjoyment of the blessings of good health and find many interesting and profitable enterprises to engage your time and attention.

Where and how are all the good people who used to be our neighbors? Scattered, no doubt, some to distant States, and some to the silent abodes of the village burial ground.

And thus, Nellie, does time make its mark, and it writes upon all living the sad, sad words, Passing away.

But I said I would be brief. Please write to me, and tell me all the items of interest. With many kind thoughts, I remain, as ever,

Truly your friend,

J. O. Everett.

Dr. Franklin to His Wife.

"Easton, Nov. 13, 1756.

"My Dear Child :

"I wrote you a few days since, by a special messenger and inclosed letters for all our wives and sweet-hearts, expecting to hear from you by his return, and to have the northern newspapers and English letters per the packet; but he is just now returned without a scrap for poor us; so I had a good mind not to write to you by this opportunity, but I never can be ill-natured enough, even when there is the most occasion. The messenger says he left the letters at your house, and saw you afterwards at Mr. Duche's and told you when he would go, and that he lodged at Honey's, next door to you, and yet you did not write; so let Goody Smith give me more judgment, and say what should be done to you. I think I won't tell you that we are all well, now that we expect to return about the middle of the week, nor will I send you a word of news—that's poz.

"My duty to mother, love to children, and to Miss Betsy and Gracy, etc., etc.

I am your loving husband,

B. Franklin.

"P. S. I have scratched out the loving words, being written in haste by mistake, when I forgot I was angry."

Burn's Idea of a Good Wife.

(ROBERT BURNS TO MRS. DUNLOP.)

The most placid good nature and sweetness of disposition; a warm heart gratefully devoted with all its powers to love me; vigorous health, and sprightly cheerfulness, set off to the best advantage by a more than commonly handsome figure; these, I think, in a woman, may make a good wife, though she should never have read a page but the Scriptures of the Old and New Testaments, nor have danced in a brighter assembly than a penny-pay wedding.



HOW TO WRITE NOTES OF INVITATION.

Notes of invitation differ from ordinary letters in the following ways: 1. More formal; 2. Wholly or partly written in the third person; 3. Date is generally written at the bottom; 4. They are without signature.

2. Materials—The paper and envelopes used should be of the finest quality.

3. A dinner invitation should be answered immediately, others (if answered at all) not later than the third day.

4. Regrets—It is more friendly and courteous to state a reason for non-attendance, than to decline without any assigned cause.

After having accepted an invitation, never absent yourself without the *strongest reasons*.

BIRTH-DAY CELEBRATION.

Mr. and Mrs. H. A. Matthews request the honor of J. A. Austin's company to celebrate their son's majority, on Wednesday evening, June tenth, 1891.

1402 Arch St.

*R. S. V. P.**

TO MEET VISITING FRIENDS.

Mr. and Mrs. C. W. George request the pleasure of W. N. Tarnutzer's company, on Friday evening, November 19th, from eight to eleven o'clock, to meet W. A. Womer.

Broad and Walnut Sts., Philadelphia.

EXCURSION.

Mr. Smith would be pleased to have your company on Thursday, Sept. 15th, to visit the park.

Carrriages will be in waiting at the Continental Hotel at 4 o'clock P. M.

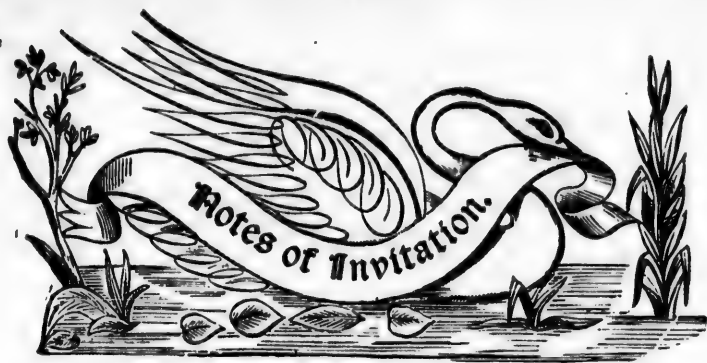
Continental Hotel. R. S. V. P.

Mr. Taylor solicits the honor of attending Miss Adams to the opera on Thursday evening next.

Tuesday, Nov. 3.

The bearer will wait for the answer.

* R. S. V. P. French, "Answer if you please."



Mr. Walter Hood presents his regards to Miss Jennie Mason, and requests the pleasure of escorting her to the Grand Opera, to-morrow evening.

246 Monroe Ave., April 10,

✻—ACCEPTANCE.—✻

Miss Jennie Mason presents her compliments to Mr. Hood, and accepts with pleasure his kind invitation to accompany him to the Opera.

April 11th

Invitation to Spend the Evening.

Mrs. M. Bell requests the pleasure of Mr. and Mrs. Howard Wilson's company, on Thursday evening, March 30th, at seven o'clock

Kaperville, Ill.

Acceptance.

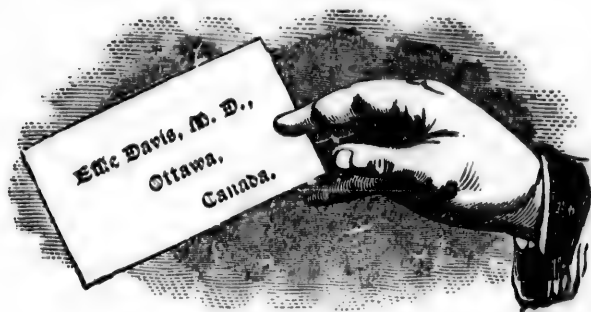
Mr. and Mrs. Howard Wilson have much pleasure in accepting Mrs. Bell's kind invitation for Thursday evening, March 30th.

Mill Avenue,
Thursday, March 19th.

Regret.

Mr. and Mrs. Wilson regret that, owing to previous engagements, they are unable to accept Mrs. Bell's kind invitation for Thursday evening, the 30th instant.

Mill Avenue,
Tuesday, March 19th.



HOW TO WRITE BUSINESS AND VISITING CARDS.

USES.—1. To serve as credentials, or certificates of authority when an indorsement or an introduction is written upon it.

2.—To make known one's name to a stranger.

3.—To announce a visitor's name when making a call.

4.—Business cards are used by business men to show their kind and place of business.

TITLES.—Social titles are *Mr.*, *Mrs.* and *Miss*. A man and his wife sometimes use a joint card, written *Mr.* and *Mrs. A. S. Barnard*. A married woman living with her husband generally uses her husband's name instead of her own, as *Mrs. Rev. J. C. Myers*. Mother and daughter when visiting together often use the same card (the daughter's name is placed below her mother's name). When two or more daughters are in society, the card of the eldest is written *Miss Barnard*, those of the others *Miss Libbie Barnard*, *Miss Rose Barnard*, etc. Clergymen, physicians and dentists use their professional titles instead of *Mr.*

Business Cards should contain in as few words as possible the leading features of the business which you desire to advertise.

E. V. Davis, M. D.

Ottawa,

58 Main St. Canada.

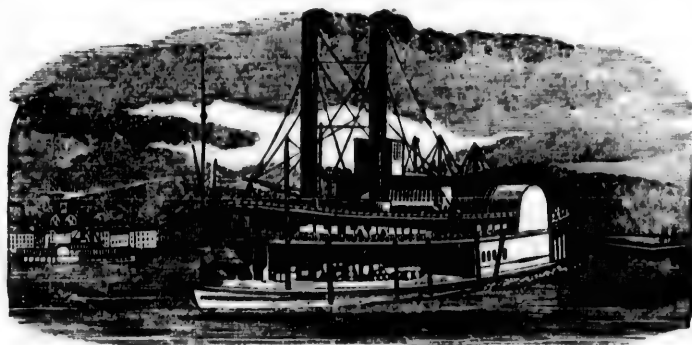
Mrs. S. A. Ballou,
The Misses Ballou,

44 Washington St.

Miss Barnard.

The Misses Kibling,
120 Ashland Ave.

Dr. & Mrs. H. A. Miller.



HOW TO WRITE, COLLECT, AND TRANSFER NOTES.

1. Notes are very common, and of great utility in business. At the present time a large proportion of all the business is transacted on credit, that is, a tradesman instead of paying for his stock when he buys it, promises to pay at some future time; that promise, whether oral or written, is itself property, and may be transferred from one to another. Hence notes which are a written and unconditional admission and evidence of a debt, facilitate the use of credit, which is and has been a great factor in the extension of commerce and trade.

2. A note is a simple written promise to pay a certain sum at a certain time, or on demand, or at sight to a person therein named.

The person who promises is called the *maker*, and the one to whom he promises is called the *payee*; the person who endorses it is called the *endorser*, and he to whom the endorser transfers it is called the *endorsee*. The person who has possession of it is called the holder.

3. Notes are made payable to bearer or to order.

4. A note not payable on demand is not due until three days after the specified day of payment.

5. Paper payable to bearer is transferred by delivery, payable to order by indorsement.

6. A note made by an intoxicated person, or minor, is voidable.

7. A negotiable note must contain five things: (1) that the date of payment be certain to come; (2) that it have one of the two words *order* or *bearer*; (3) that the amount be specified and certain; (4) that it be payable in money only; (5) that it be an unconditional promise.

8. A signature written with a lead pencil, a mark, or initials, is valid.

9. If no time is specified, the note is payable on demand.

10. All the parties who have written their names on a note are liable for the amount due; but only one satisfaction can be recovered.

11. An indorser can avoid liability by writing "without recourse" on the back of the note with his signature.

12. A promissory note does not bear interest until after maturity, unless so specified. Interest can be charged from date only where it is so expressed, otherwise interest can be charged from date of payment only.

13. Only the legal rate of interest, six per cent., can be charged, unless a greater rate be specially mentioned on the face of the note.

14. A demand note is payable on presentation without days of grace, and will bear legal interest after a demand has been made.

15. A person who indorses a demand note is liable only for a limited time.

16. To make the indorser of a note responsible, the note must be presented and payment demanded of the maker on the very day when it becomes due. If payment is refused, the note must be protested and notice must be given immediately to the indorser or indorsers.

17. A note given by one who cannot write should be witnessed.

18. A note lost or destroyed by fire can be collected by sufficient proof, but the payee must be indemnified.

19. Fraudulently making or altering a written instrument is forgery.

20. A forged instrument is *not* commercial paper, and one whose name is forged cannot be made responsible.

21. A note obtained through fraud, in the hands of an innocent party who has acquired it in good faith and for value, may be collected.

22. Notes may be transferable after they are due, but only subject to all defects.

23. Always write the name of the place of payment. It is just as important as the date.

24. A note may be written in any language, and any form of words.

25. Negotiable paper, payable to bearer, or indorsed in blank, which has been stolen or lost, cannot be collected by the thief or finder, but a holder who receives it in good faith before maturity for value, can hold it against the owner's claims.

26. Money paid under mistake must be refunded.

27. Demand for payment of a note must be made upon the last day of grace; if that day is a Sabbath or a holiday, demand must be made on the day following.

28. One who receives a note knowing it to have defects, gets no better right to collect it, than the one from whom he received it had.

29. If a person at the time of taking a note, has notice that it is void through fraud, or upon any legal grounds, he cannot collect it.

30. A note as a gift is void for want of a consideration.

31. Upon presentment for payment and refusal by maker at maturity, the note should be protested by a Notary Public.

32. An extension of the time of a note by holder, releases sureties and indorsers, unless they ratify the change.

33. The signature on a note or bill must be proven.

34. When several persons unite in a note and say: "*we promise*," or "*we jointly promise*," it is a joint liability only, and all must be sued; but if they say *we* or *either of us promise*, or "*we jointly and severally promise*," the liability is both joint and several, and either or all may be sued.

35. When a note says "*I promise*," but is signed by two or more, each signer is bound for the whole amount, and each or all may be sued.

36. A note given by one who is not of age cannot be collected by law. If the minor ratifies after becoming of age, it becomes valid.

37. When a note or bill contains words prohibiting transfer, or indicating an intention that it should not be transferable, it is valid as between the parties thereto, but it is not negotiable.

38. A material alteration in any part of a note, as in the amount, date or time of payment, will discharge all parties from liability upon such altered note, unless they are aware of the alteration and ratify it.

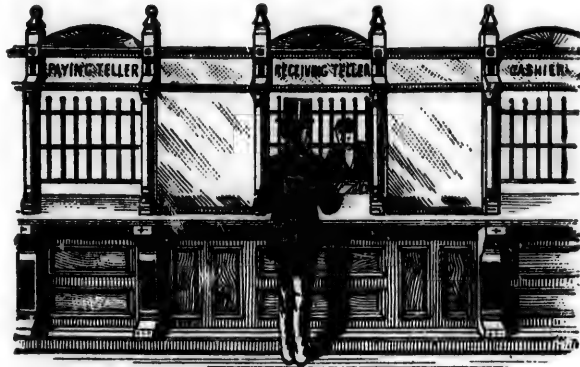
39. The word month in a note, means a *calendar* month, and not a *lunar* month; thus a note payable one *month* from the 31st day of January, 1892, is payable three days after the 29th day of February, 1892; this is on the 3d day of March, 1892.

40. A note which is, or on the face of it purports to be, both made and payable within Canada, is an inland note; all others are foreign notes.



GEORGE WASHINGTON.

Washington studied and mastered without help the intricate forms of business. He copied bills of exchange, notes, drafts, bills of sale, receipts, and all the varieties of business forms with a precision and elegance that were remarkable. — Irving.



How to Discount a Note at the Bank.

1. **DISCOUNT** is a certain percentage deducted from a note or debt for the payment of same before it is due.

2. **BANK DISCOUNT** is simple interest on the principal, taken in advance, and is usually reckoned for *three days* more than the specified time.

3. In discounting a note which is drawing interest, the discount must be reckoned on the amount or value of the note when due. (The interest for the full time must be first added to the face of the note before computing the discount.)

Example.— Robert F. May, on May 2d, offered the following note, properly indorsed, for discount:—

\$525.

PHILADELPHIA, MARCH 29, 1891.

Sixty days after date, we promise to pay to Robert F. May, or order, at the Union National Bank, Five Hundred and Twenty-Five Dollars, without defalcation. Value received.

R. J. BIRNEY & Co.

How much will he receive as the net proceeds of the above note?

Sixty days from March 29th is May 28th, which, with the three days of grace added, gives May 31st. From May 2d to May 31st, including the day of discount, is 30 days.

Interest on \$525 for 30 days = 2.63 discount.

525 — 2.63 — 522.37 net proceeds.

A NOTE.

\$15 $\frac{25}{100}$

Chicago, Ill., July 10, 1892.

Seven months after date, I promise to
pay Garmon & Smith, or order, Fifteen and $\frac{25}{100}$
Dollars, with interest at six per cent. Value
received.

J. L. Nichols & Co.



The Safe Way to Write All the Different Forms of Notes.

\$375.00.

Montreal, Oct. 7, 1892.

One year after date I promise to pay to
J. L. Nichols, or order, Three Hundred and
Seventy-five Dollars, for value received, with
interest at six per cent.

J. R. Price.

Payable at Bank.

\$140.00.

Naperville, Ills., Oct. 10, 1891.

Two years after date, for value received, I promise to
pay N. A. Lundy, or order, Four Hundred and Forty Dollars
at Second National Bank. Interest at eight per cent. per
annum.

P. D. Crimmins.

A Note by One who Cannot Write.

\$49.50.

Cleveland, Ohio, Mar. 20, 1892.

One year after date, I promise to pay D. A. Pfitzinger, or order, Forty-nine $\frac{50}{100}$ Dollars, with interest at eight per cent. Value received.

his
John + Rourke,
mark.

Michael Curtis, Witness.

N. B.—A note made by a person who cannot write should always be witnessed by a disinterested person.

On Demand.

\$25.67.

Toronto, Ont., Oct. 12, 1891.

On demand I promise to pay to the order of J. D. Jones, Twenty-five $\frac{67}{100}$ Dollars. Value received, with interest at six per cent.

J. P. Reynolds.

NOTE.—This note answers the same purpose as a note written one day after date.

My Own Order.

\$200.00.

Ottawa, Ont., July 20, 1892.

For value received, I promise to pay, sixty days after date, to my own order, Two Hundred Dollars, with interest at eight per cent.

A. S. Barnard.

NOTE.—A note may be drawn to the maker's own order, with his indorsement in favor of the creditor. This note then can be transferred without indorsement.

Joint Note.

\$200.

Lisle, Ills., Jan. 1, 1891.

One year from date, we promise to pay P. D. Crimmins, or order, Two Hundred Dollars. Value received. Interest at six per cent.

Edward Strohm.
Chas. Schwartz.

Principal and Surety Note.

\$600.

Montreal, Sept. 21, 1892.

For value received, on or before July 27, 1893, I promise to pay to the order of Grover Cleveland, Six Hundred Dollars. Interest at nine per cent.

Peter Thompson, *Principal*.
Jasper Dille, *Surety*.

NOTE.—The general form of a Principal and Surety is for the principal to properly sign the note, and the surety to indorse it.

Collateral Note.

\$500.

Mendota, Texas, Sept. 25, 1892.

Sixty days after date I promise to pay to the order of Elmer Wicks, Five Hundred Dollars, without defalcation, for value received. Interest at eight per cent.

Having deposited United States' Bonds of the nominal value of Six Hundred Dollars, which I authorize the holder of this Note, upon the non-performance of this promise at maturity, to sell, either at the Brokers' Board or at public or private sale, without demanding payment of this Note or the debt due thereon, and without further notice, and apply proceeds, or as much thereof as may be necessary to the payment of this Note, and all necessary expenses and charges, holding myself responsible for any deficiency.

Philo Barber.

Accommodation Note.

\$500.00.

Meriden, Vt., March 13, 1892.

Sixty days after date I promise to pay to the order of Frank Bryant, Five Hundred Dollars, at the Earlville National Bank, without defalcation. Value received.

Henry Lundy.

Credit the drawer, }
Frank Bryant. }

NOTE.—An accommodation note is where a person gives his note to another person, who is by agreement permitted to take it to the bank and have it discounted. In the hands of the original holder it cannot be collected.

A Note by a Married Woman.

\$200.00.

San Francisco, Cal., June 15, 1892.

Two years after date, I promise to pay Fred. Lueben, or order, Two Hundred Dollars, with interest at eight per cent., payable annually. Value received.

Mrs. Mary Chandler.

N. B.—A married woman could formerly incur no liability, but now the statutes of the various States give her more or less freedom to enter into contracts, and consequently her note can be enforced against her. But in most States she cannot be bound by a note given to her husband, nor can he give a note to her. If she lends money to him and takes his note, a court of equity will oblige the husband to pay her, but the court of law will not.

Joint and Several Note.

\$2,000.00.

Ottawa, Ont., Nov. 25, 1892.

Ten months after date, we, or either of us, promise to pay Maggie Patterson Two Thousand Dollars, value received. Interest at five per cent.

E. C. Wicks.

John Lindsley.

Chattel Note.

\$700. Earlville, Ills., Aug. 17, 1892.

Thirty days from date, for value received, I promise to pay A. B. Cody, or order, Seven Hundred Dollars in Warrenville Flour, at the then market rate, the same to be delivered at the option of the owner within the limits of the town of Earlville.

B. B. Boecker.

Produce Note.

\$37.00. Memphis, Tenn., Nov. 20, 1892.

For value received, I promise to pay to Geo. Finkbiner, on demand, Thirty-seven Dollars, in goods at our store.

J. L. Strohm.

Judgment Note.

\$600.00. Mt. Vernon, Ia., July 1, 1892.

One year after date I promise to pay H. M. Schrepfer, or order, Six Hundred Dollars at First National Bank, with interest at six per cent. per annum, after July 26, 1892, until paid.

And to secure the payment of said amount, I hereby authorize, irrevocably, any attorney of any Court of Record to appear for me in such Court, in term time or vacation, at any time hereafter, and confess a judgment without process in favor of the holder of this Note, for such amount as may appear to be unpaid thereon, together with the costs and twenty dollars attorney's fees, and to waive and release all errors which may intervene in any such proceedings, and consent to immediate execution upon such judgment, hereby ratifying and confirming all that the said attorney may do by virtue thereof.

S. H. Streyffeler.

A Corporation Note.

\$200.00. Augusta, Me., Mar. 18, 1892.

Nine months after date, the Granite Stone Company promises to pay J. D. Huling, or order, Two Hundred Dollars, with interest at seven per cent. Value received.

Naperville Stone Company.

Attest: I. K. Devitt, Secretary, T. P. Phillips, President.

N. B.—If corporation notes are drawn and signed in the above manner the officers are not personally liable.



How the Different Notes and Bills are Indorsed.

1.—Blank Indorsement.

A blank indorsement is writing the name of the holder on the back of the note. This, however, is not the best form of indorsement, and should rarely be used. Form 1 (page 84) is indorsed in blank as follows:

FORM A.

J. L. Nichols.

N. B.—This note is now transferable without further indorsement.

2.—Full Indorsement.

When the holder writes upon the back of the note, or bill, the name of the person to whom it is to be paid, and makes it payable to his order, and signs his name below, it is called a FULL INDORSEMENT.

Form 2 (page 84) is indorsed in full, and made payable to the order of J. A. West.

FORM B.

*Pay to the order
of J. A. West.
J. A. Lundy.*

N. B.—This note cannot be sold or transferred without Mr. West's indorsement.

3.—Qualified Indorsement, or How to Avoid Liability.

This is generally done by inserting the words "WITHOUT RECOURSE" in the indorsement. It relieves the indorser from all liability to pay, while at the same time it transfers the title perfectly to the one to whom it is sold.

FORM C.

Pay B. G.
Morton or
order, without
recourse.
J. D. Jones.

4.—Restrictive Indorsement.

A restrictive indorsement is intended to confine the payment to some particular person or purpose. Form 2 (page 84) is restrictively indorsed as follows:

FORM D.

Pay to J. A.
West only.
W. A. Lundy.

N. B.—This note cannot be transferred. The mere omission of the words "order" or "bearer" in an indorsement on the back of a note or draft does not have the same effect as the omissions of the same words in the face of the note or draft. If omitted on the face, it restricts negotiability.

5.—Conditional Indorsement.

Neither the original character of the note nor its negotiability is affected by a conditional indorsement. It only affects the title of the one to whom it is transferred.

FORM E.

Pay J. A. West,
or order, unless
I give you no-
tice not to pay
before maturity.
J. C. Humes.

FORMS OF INDORSEMENTS.

1. Indorsement in Blank.

John S. Barton.

2. Indorsement in Full.

Pay to Jas. Jones, or order.
John S. Barton.

3. Qualified Indorsement.

Without recourse.
John S. Barton.

4. Restrictive Indorsements.

Pay Robert Hunter, for my
use.

John S. Barton.

Pay to Chas. Harrison only.

John S. Barton.

5. Conditional Indorsement.

Pay George Gray, or order,
the within, unless before due
he receives the amount from
my agent.

John S. Barton.

6. Indorsement by an Agent.

John S. Barton,
Agent for Howard Chester.

7. A Guaranty on a Note.

For value received in cash,
I hereby guarantee the pay-
ment of the within note.

John S. Barton.

1. The word *indorsement* signifies a writing on the back of a bill or written instrument.

2. The indorsement may be on any part of the note, or on a paper annexed to it, in ink or in pencil.

3. When note or bill is drawn payable to a person or his order, it is transferable only by his indorsement. Nothing else in law will hold the parties to a note directly liable to the holder.

4. When money is received on a bill or note, the amount and date of receiving should be plainly written on the back of the paper.

THE FORM OF A MONEY INDORSEMENT.

Received on within note
Oct. 4, 1891,
Thirty Dollars (\$30.00).
Nov. 1, 1891,
Fifty Dollars (\$50.00).

How to Write, Present, and Indorse a Check.

1. A check is a simple order on a bank for the immediate payment of a certain sum of money.
2. A bank can stamp a check good, or certify it, and thus become responsible to the holder for the amount.
3. In sending a check away from your own town or locality, it should always be certified, as in the above.
4. A check is not due until presented. It is negotiable, and may be transferred by endorsement or delivery. It has no days of grace.
5. Giving a check is no payment of an indebtedness, unless the check is paid.
6. The death of the maker of the check before presentment to the bank, renders the check null and void.
7. A forged check paid by the bank is the bank's loss, and not the depositor's.
8. Payment of a check may be stopped by subsequent order to bank by maker before presentment of check.
9. The amount of the check should always be written out in words.
10. Every holder of a check is liable to a subsequent holder only for the time for which he would be held, if originally liable.
11. It is the safest rule always to act with diligence in presenting checks for payment.
12. Certificates of Deposit are used when money is deposited for a short time, and no regular bank account is kept. They can be used the same as a certified check.
13. In presenting a check to the bank for payment, always write your name on the back before presenting it.
14. If you have money in a bank and you wish to draw out a certain sum, write "Pay to myself," instead of writing your name in the body of the check, and then sign it.
15. A safe bank ought to be patronized, for it is dangerous to keep in possession or carry large sums of money.
16. If a bank refuses to pay a customer's check drawn for a sum not greater than the amount he has on deposit there, it is responsible in damages to such customer. But a bank is not bound to pay anything on a check unless it has funds on deposit to the customer's credit equal to the amount of the check.
17. An "I. O. U." is only an acknowledgment in writing of an indebtedness, and is not assignable by mere endorsement except in Quebec.



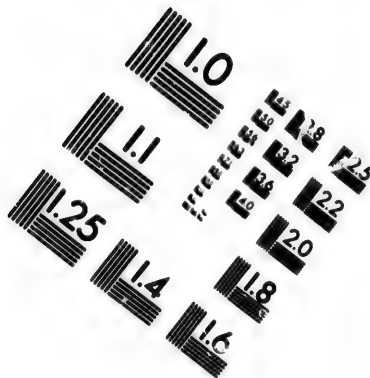
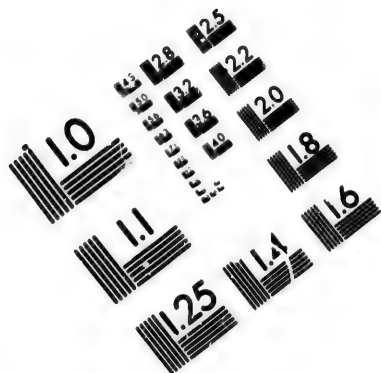
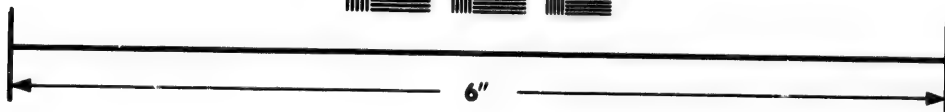
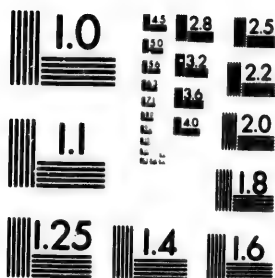


IMAGE EVALUATION TEST TARGET (MT-3)




**Photographic
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Corporation**

23 WEST MAIN STREET
WEBSTER, N.Y. 14580
(716) 872-4503

18
20
22
25

10

All the Different Forms of Checks.

	STAMP.	No. 245.	Chicago, April 6, 1891.
	Naperville		National Bank,
	Pay to.....	Hugh	Graham, or Order,
	.....	One	Thousand Dollars.
	\$1000.		J. A. West.

Good when properly indorsed.
H. Wells, Teller.

1. PAYABLE TO YOURSELF.

\$100.00. Lexington, Mo., Mar. 20, 1891.
Lexington National Bank, Pay to myself One Hundred Dollars.
W. D. Atkinson.

2. PAYABLE TO BEARER.

\$150.00. Naperville, Ills., Jan. 1, 1891.
First National Bank, Pay to J. L. Nichols, or bearer,
One Hundred Fifty Dollars.
Willard Scott & Co.

3. PAYABLE TO ORDER.

\$240.45. Earlville, Me., June 6, 1891.
Earl Exchange Bank, Pay to F. B. Smith, or order,
Two Hundred Forty $\frac{45}{100}$ Dollars.
O. M. Powers.

4. CERTIFICATE OF DEPOSIT.

\$225.00. Philadelphia, Nov. 12, 1890.
Keystone National Bank.
Thomas Hendricks has deposited in this Bank Two Hundred Twenty-Five Dollars, payable to the order of John A. Logan, on the return of this certificate properly indorsed.
C. E. Cramer, Cashier.

HOW TO WRITE ALL KINDS OF RECEIPTS.

A RECEIPT is an acknowledgment in writing that a certain sum of money or thing has been received by the party giving and signing the same.

A complete receipt requires the following statements : That a payment has been received; the date of the payment; the amount or article received; from whom received, and if for another, on whose behalf payment is made; to what debt or purpose it is to be applied; by whom received, and if for another, on whose behalf it was received.

2. If the giving and receiving of receipts was more strictly held to in the transactions of the various kinds of business, less trouble, fewer law-suits, and the saving of thousands of dollars would be the result.

3. If payment is made *upon account, upon a special debt, or in full*, it should be so stated in the receipt.

4. When an agent signs a receipt, he should sign his name, and then write his principal's name underneath.

5. It is not necessary to take a receipt on paying a note, draft, or other instrument indorsed by the payee, because the instrument itself shall be given up and becomes a receipt.

6. If a receipt is obtained through fraud, or given under error or mistake, it is void.



Receipt for the Purchase of a Horse.

\$200.00.

Omaha, Neb., March 20, 1892.

Received of J. Lerch, Two Hundred Dollars, for a black mare, warranted only six years old, sound, free from vice, and quiet to ride and drive.

Charles M. Smith.

ALL THE DIFFERENT FORMS OF RECEIPTS.

Receipt for Payment on Account.

\$250.00. Toronto, Ont., July 4, 1892.

Received of J. L. Nichols, Two
Hundred and Fifty Dollars on account
J. N. Rohmer.

2. Receipt for Settlement of an Account.

Joliet, Ills., March 20, 1891.

Received from Thomas Rourke, Two Hundred and
Twenty ¹¹/₁₀₀ Dollars, in settlement of account to date.

C. S. Selby.

3. Receipt in Full of all Demands.

Meriden, Conn., Jan. 14, 1891.

Received of E. R. Wicks, One Thousand Dollars, in full
of all demands to date.

J. F. Hielscher.

4. Receipt for a Particular Bill.

Brooklyn, N. Y., Aug. 1, 1891.

Received of Morris Cliggitt, Four Hundred Dollars, in
Payment for a bill of Merchandise.

B. G. Barrett.

5. Receipt for Rent.

Snyder, Tex., Mar. 20, 1891.

Received of L. Heininger, Forty Dollars, in full for one
month's rent of residence at 44 Olive Street.

J. G. Litt.

6. Receipt for a Note.

Rec'd, Buffalo, March 6, 1891, from Messrs. Taylor & Co.,
their note of this date, at three months, our favor, for Twelve
Hundred and Twenty Dollars; which, when paid, will be in
full of account rendered to 1st instant.

\$1220.00.

William Barber.

7. Receipt for Service.

Lemont, Ill., July 23, 1891.

Received from Samuel Lynn, Forty-Four Dollars, in full
for service to date.

\$44.00.

Daniel Furbush.

8. Indorsement of a Partial Payment of a Note.

Rec'd, March 4, 1883, on account of within note, Three Hundred Dollars (\$300 00).

9. Receipt for Borrowed Money.

\$35.00. Naperville, Ills., July 20, 1891.

Borrowed and received from D. B. Givler, Thirty-Five Dollars, which I promise to pay on demand, with interest.

Henry Raymer.

10. Receipt for Property.

Rochester, N. Y., April 14, 1891.

Received of Louis Heininger, the following enumerated articles, to be held in trust for him, and returned on his demand: One Gold Watch, two Promissory Notes, each dated March 4, 1886, and signed by Henry Taylor,—one for Three Hundred Dollars, and one for Seven Hundred, each due one year from date.

William Place.

11. Receipt for Payment by the hand of a Third Party.

\$450.00. Joliet, Ky., June 4, 1891.

Received from Carl Cook by the hand of Frank Furbush Four Hundred and Fifty Dollars, in full for proceeds of sale of stock, sold May 28, 1891.

John Rourke.

HOW TO WRITE ALL KINDS OF ORDERS.

\$54.00. *Montreal, July 1, 1892.*
Messrs. M. Brown & Co will please
pay to the bearer Fifty-four Dollars in
goods, and charge the same to my account
J. B. Moulton.

2.

In Full of Account.

\$25.00.

St. Louis, April 13, 1891.

C. A. Mather, Esq.:

Please pay John Rickert, or
bearer, Twenty-Five Dollars in goods, and this shall be your
receipt in full of my account.

P. D. Crimmins.

3.

For Goods.

New Orleans, March 4, 1891.

Mr. W. W. Walsworth;

Please send me per bearer ten barrels of Genesee
Flour, and oblige,

Yours truly,

Minnie Howard.

Orders are negotiable, but the person on whom they are drawn is not
under obligation to pay them, unless they have been accepted, for an order
partakes of the nature of a draft.

HOW TO WRITE ALL KINDS OF DUE-BILLS.

\$125.00.

Chicago, Aug. 14, 1891.

*Due Henry Harrington, for value
received, One Hundred and Twenty-five
Dollars, with interest.*

D. Zinger.

On Demand.

\$250.00.

Naperville, Ill., July 1, 1891.

Due J. O. Everett, on demand, Two Hundred Fifty Dol-
lars in goods from my store, for value received.

A. T. Hanson.

In Merchandise.

\$1000.00.

Lincoln, Neb., Nov. 1891.

Due R. Williams, or order, One Thousand Dollars, pay-
able in wheat at market price, on the first day of January
next.

Charles Lamb.

A Due-Bill is not generally payable to order, nor is it assignable by mere
indorsement. It is simply the acknowledgment of a debt; yet it may be
transferred.

Due-bills do not draw interest, unless so specified.

HINTS AND HELPS FOR WRITING, ACCEPTING, AND TRANSFERRING ALL KINDS OF DRAFTS.

1. A draft, or bill of exchange, is an unconditional written order by one person on another for the payment of a specified sum of money.

2. The one who writes the draft is called the "*drawer*," the one on whom it is written the "*drawee*," and the one to whom it is to be paid the "*payee*." If the drawee accepts the draft, he is called the "*acceptor*." If the payee transfers the draft by endorsement, he is called the "*endorser*;" if he transfers it by delivery without endorsement, the "*transferor*."

3. Drafts may be made payable at sight, on demand, or at a certain time after date, or after sight.

4. The person drawn upon is under no obligation to the holder of the draft unless he accepts it.

5. The usual method of writing an acceptance is, to write across the face of the draft, with red ink, the word "*Accepted*," following with place of payment, date and signature.

6. When acceptance or payment is refused, the draft may be protested.

7. A protest is a formal declaration made by a notary public, under his hand and seal, at the request of the holder, for non-acceptance or non-payment, and the parties liable are formally notified.

8. Drafts are negotiable both before and after acceptance, unless they contain words indicating an intention that they are not transferable.

9. Drafts drawn at sight or on demand are not presented for acceptance, but for payment only.

10. In buying a draft at the bank, it is always best to have it made payable to yourself, and then indorse it in favor of the party to whom you intend to transfer it. This gives you a good receipt for the money.

11. A promise to accept a draft will be equivalent to an acceptance if it has given credit to the bill.

12. Drafts on foreign countries are usually drawn in sets of three, each one referring to the other two. In order to prevent loss in transmission. They are sent by different routes, and the payment of one of them cancels the three.

13. An inland draft is one which is, or on the face of it purports to be, both drawn and payable in Canada; all others are foreign.

FORMS OF DRAFTS.

Accepted Draft.

<p>\$250 $\frac{75}{100}$</p> <p>At Ten days' sight,</p> <p>of Thomas W. Jones,</p> <p>Fifty..... $\frac{75}{100}$ Dollars,</p> <p>Value rec'd, which</p> <p>To R. R. Robinson & Co.,</p> <p>Wilmington, Del.</p>	<p><i>Amara, Ills., Dec. 8th, 1891.</i></p> <p><i>pay to the Order....</i></p> <p><i>Two Hundred and</i></p> <p><i>place to Account of</i></p> <p><i>J. R. Williams.</i></p> <p><small>Accepted Dec. 12, 1891. R. R. Robinson & Co.</small></p>
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1. Sight Draft.

\$500.

Naperville, Tenn., July 10, 1891.

At sight pay to the order of Frank Keeler, Five Hundred Dollars, and charge to the account of

To D. Bowers,
Meriden, Ills.

E. Miller.

2. Time Draft.

\$100.

Troy Grove, Ills., Aug. 1, 1891.

At ten days' sight pay to the order of Bernie Rogers at the Mendota First National Bank, One Hundred Dollars.

Value received.

Clark Dowling.

To Chas. Strong,
Mendota, Ills.

3. Time Draft, Second Form.

\$450 30.

Ottawa, Fla., July 5, 1891.

Ten days from date pay to J. L. Nichols, or order, Four Hundred Fifty $\frac{30}{100}$ Dollars. Value received.To Fred. J. Davis,
Ottawa, Fla.

William Curtis.

4. Drafts to My Own Order.

\$500.

Wheaton, Ala., May 1, 1891.

Ten days after sight, pay to my own order Five Hundred Dollars, and charge to

To Reed Avery,
Earlville, Ills.

Rufus Parks.



HOW TO DO BUSINESS WITH A BANK.

1. National Banks are required by the United States to deposit interest-bearing bonds with the Treasurer at Washington in proportion to the capital stock paid in.

2. Banks of "circulation and deposit" have the use under certain restrictions of capital paid in by the stockholders, the money belonging to the depositors and the notes of their own circulation.

3. Make your deposits in the bank as early in the day as possible, and never without your bank-book.

4. Always use the deposit tickets furnished by the bank. When checks are deposited, the banks require them to be indorsed, whether drawn to his order or not.

5. Keep your check-book under a lock and key.

6. Draw as few checks as possible; when several bills are to be paid, draw the money in one check.

7. Do not allow your bank-book to run too long without balancing. Compare it with the account of the bank.

8. In filling up checks, do not leave space in which the amount may be raised.

9. Write your signature with the usual freedom, and never vary the style of it.

10. Every check is paid by the bank at its own risk. If forged the bank must lose the amount.

11. If a raised check is paid by the bank, it can only charge the depositor the amount for which he drew.

12. Always keep the stub of your check book, and in issuing a check always fill the stub out first.

HOW TO FILL OUT A CHECK.

100

\$ _____ Webster City, Iowa, _____ 18 _____

First National Bank

Pay to _____ or Order, _____ Dollars,

No. _____

1. On the first blank line at the top write the number of dollars in figures, and then the date in the blank line following the name of the town and State.
2. After the words "Pay to" write the name of the party in whose favor the check is drawn, and on the next line below write out the amount to be paid in full.
3. On the last line at the left, write the number of the check (if you desire to number it) and then sign your name on the last blank line at the right.

IOWA

(For name to number it) and then sign your name on the last blank line

at any right.



Toronto. Nov. 5, 1889

First National Bank

Pay to — James Munro — or order.

One Hundred — X Dollars.

W M Turner



COMMON FORM OF BANK CHECK.

HOW TO ENDORSE A CHECK AT THE BANK.

1. The Check is the most common commercial paper in use, and it is astonishing to see how many intelligent and educated people lack the necessary information on this subject.

2. Write *across* the back (not lengthwise) near the left end.

3. Simply writing your name on the back is a blank endorsement, and signifies that it has passed through your hands, and is payable to bearer.

4. If you wish to make the check payable to some particular person, write: Pay to the order of (*Person's name*), and then sign your name below.

5. Always endorse a check just as it appears on the face. If a check is payable to F. Block, it cannot be endorsed Frank Block. If the spelling of the name on the face of the check is wrong, endorse first as the name appears on the face, and below this first endorsement write your name correctly.

6. If the name on the face of the check is written Rev. F.W. Heidner, it must be so written in the endorsement.

7. If you wish to deposit a check, write: "For Deposit," and below this your name.

Form of an Endorsement When Transferred.

<i>Pay to the order of M. Rothstein per D. E. Burley.</i>	
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When Presented for Payment.

<i>F. Smith.</i>	
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HOW TO FILL OUT BLANK CHECKS, NOTES, ETC., AND KEEP THE STUBS.

No. 1.	Feb. 2d, 1887.
Wm. F. Barker,	
for Merchandise.	
\$300.	

No. 1.	Naperville, Ill., Feb. 2, 1887.
National Exchange Bank,	
Pay to.....	Wm. F. Barker,.....or Bearer,
Three Hundred	⁰⁰ / ₁₀₀ Dollars.
\$300.	F. A. Mauer.

300

\$240 ⁴⁰	
To C. C. Mumm.	
For Merchandise.	
Date March 3, 1887.	
Time One year.	
Due March 6, 1888.	
No. 1.	

\$240 ⁴⁰	Naperville, Ill., Feb. 3, 1887.
One year.....	after date...I...promise to pay to
the order of.....	C. C. Mumm,.....
Two Hundred Forty.....	⁴⁰ / ₁₀₀ Dollars,
at...six per cent. interest.	Value received.
No. 1. Due.....	M. A. Thoburn.



(JOINT NOTE NEGOTIABLE.)

Montreal.

July 1, 1889.

Three months after date we promise to pay

W. H. Marriot

or order.

at Canadian Bank of Commerce here.

One Hundred

X Dollars.

for value received.

J. David
W. L. Guin

JOINT NOTE THAT CAN BE TRANSFERRED.

(FOR INTEREST DUE ON MORTGAGE.)

\$75⁰⁰/₁₀₀

CHICAGO, August 1, 1889

Received of G.A. Catoni Seventy-five Dollars, in full of my year's interest, due this day, on his mortgage to me, dated August 1st, 1881, for Six Hundred Dollars.
No. 6.

Edw. Frost.



A RECEIPT FOR INTEREST DUE ON A MORTGAGE.

Exchange for £100. New York, May 1, 1892.

Sixty days after sight of this First of Exchange,

(Second and Third of the same tenor and date unpaid);

Pay to the order of N. D. Bryant & Son

One Hundred Pounds Sterling


Value received, and charge the same to account of

To Messrs. Morgan & Co.

No. 74 London

W. A. Gannon

A FOREIGN DRAFT, OR BILL OF EXCHANGE.

	<p style="text-align: center;">(JOINT AND SEVERAL NOTE NEGOTIABLE.)</p> <p>Buffalo <u>July 1, 1889</u></p> <p><u>Four months</u> after date, we jointly and severally</p> <p>promise to pay <u>J. K. Cameron</u> or order,</p> <p>at <u>Standard Bank</u> here,</p> <p><u>Five Hundred</u> <u>X</u> Dollars.</p> <p>for value received.</p> <p style="text-align: right;"><u>C. O'Dea</u> <u>Edw. Trout</u></p>
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A JOINT AND SEVERAL NOTE TRANSFERABLE.



IT TAKES TWO TO MAKE A CONTRACT.

HOW TO WRITE A CONTRACT.

Rule :—1. The parties to a Contract are taken in the order in which they are written and referred to as "the party of the first part," "the party of the second part," without repeating their names. It matters not which name is written first.

2. After writing the date, names of the parties and their places of residence, state fully all that the first party agrees to do, and then state all that the second party agrees to do.

3. Next state the penalties or forfeitures in case either party does not faithfully and fully perform, or offer to perform, his part of the agreement.

4. Finally, the closing clause, the signatures and seals, the signatures of witnesses are written.

No particular form of legal language is necessary. Use your own words and state in a plain way just what you want done. Anyone who can write a letter and express his desire in an intelligent manner can write a contract.

Errors in grammar or spelling do not affect the legality of the agreement.

If the language should be obscure on certain points, the "court" will always interpret the *intent* of the parties when they entered into the agreement.

When an agreement is written it must all be in writing. It cannot be partly written and partly oral.

The Law Governing All Kinds of Contracts.

1. A contract is a mutual agreement between two or more competent parties for a valuable consideration to do or not to do a particular thing.

2. It must have, 1. Parties; 2. Subject Matter; 3. Consideration; 4 Assent of the parties. There cannot be a contract when any of these are wanting.

3. A consideration is the *thing* which induces a person to make a contract.

4. An alteration of a contract in a material part, after its execution, renders it void.

5. A contract the law forbids is void. Fraud renders all contracts voidable.

6. A contract made by a minor, a lunatic, or an idiot is not binding upon him, yet he can hold the party with whom he contracts, to all conditions of the contract.

7. A contract not consistent with law or for immoral purposes is void.

8. A fraudulent contract may be binding on the party guilty of fraud, although not laying any obligation on the part of the party acting in good faith.

9. A contract for the sale or purchase of personal property of the value of \$40.00 (in Province of Prince Edward Island \$30.00) and upwards must be in writing, except when the buyer accepts at least a part of the goods sold and actually receives the same, or gives something in earnest to bind the bargain or in part payment.

10. Any special promise by an executor or administrator to answer damages out of his own estate, and any agreement made upon consideration of marriage, must be in writing.

11. Any contract or sale of lands, tenements or hereditaments, or any interest in or concerning them, must be in writing.

12. A contract which is not to be performed within a year must be in writing.

13. A guaranty must be in writing.

14. In contracts regarding matters of importance it is advisable to have a seal. Consideration is presumed in all contracts under seal.

15. If no time of payment is stated in the contract. payment must be made on the delivery of the goods.

16. A contract totally restraining the exercise of a man's trade or profession is void, but one restraining him in any particular place is not void.

17. An offer or proposal, which includes the essential parts of a contract, becomes a contract as soon as accepted.

18. A contract required by law to be in writing cannot be dissolved by verbal agreement.

19. A contract cannot be partly written and partly verbal. It must be wholly written or wholly verbal.

IGNORANCE OF LAW EXCUSES NO ONE.



JUSTICE.

CONTRACTS THAT ARE NOT LAWFUL.

1. A contract to commit a breach of peace or other offense.
2. A contract in violation of a statute of the Province in which it is made.
3. An agreement to prevent competition on a sale under an execution.
4. An agreement to prohibit the carrying on of a trade throughout the Province.
5. A contract with an intoxicated person, lunatic or minor.
6. All agreements in which there is fraud.
7. An agreement made by threats or violence.
8. A contract impossible in its nature: such as crossing the ocean in one day, is void.

9. Guardians, Trustees, Executors, Administrators or Attorneys cannot take advantage of those for whom they act by becoming parties to the contract.

10. Useless things cannot become the subject of a contract: such as agreeing not to go out of the house for a month.

11. Contracts made on Sunday are void, except in particular cases.

12. The right to vote or hold office, etc., cannot be sold by contract.

13. Contract without a consideration: such as a promise to make a gift, cannot be enforced.

14. An agreement for immoral purposes.

15. Where consent to an agreement is given by mistake, it cannot become a contract.

16. If a thing contracted for was not in existence at the time of making the contract, such as buying a horse and not knowing that he was dead at the time, is not good.

17. If a person agrees to serve as a laborer or clerk, he cannot be compelled to fulfill his agreement: damages, however, can be recovered.

18. Two or more persons intentionally cannot make a contract to the injury of a third person.

19. Wagers or bets cannot be collected by law.

20. More than legal interest cannot be collected, unless agreed to.

21. Contracts for concealing felony or violating public trust, for bribery and extortion are prohibited.

22. Contracts in which there is misrepresentation or concealment of material facts cannot be enforced. It is a fraud to conceal a fraud.

23. Money borrowed for the purpose of betting, the lender knowing it to be for that purpose, cannot be collected.

24. If any part of a contract is illegal, the whole is illegal, unless the legal part can be clearly separated from the illegal part.

25. A verbal release without payment or satisfaction for the debt is not good.

26. If there are two parts to a contract, and one conflicts with the other, the first part holds good in preference to the last.

27. An agreement with a thief to drop a criminal prosecution, by his bringing back the goods and paying all damages, is not good, and will be no bar to a future prosecution.

28. Transactions not positively forbidden, but against public policy, are unlawful.

29. Marriages within the prohibited degrees of kindred.

30. Agreements for future separation of husband and wife.

31. Agreements to furnish money or evidence for litigation on terms of sharing property recovered.

32. Contracts made on Sunday (with few exceptions).



**BE SURE YOU ARE RIGHT,
THEN GO AHEAD.**



A Contract for the Sale of Horses, Cattle, or other Personal Property.

THIS AGREEMENT, between A. B. Johnson and C. D. Coddington, made this nineteenth day of October, 1891, witnesseth :

That said A. B. Johnson, for the consideration hereinafter mentioned, shall sell and deliver on the first day of November next to said C. D. Coddington at his residence, One Double Wagon, Two Four-Year Old Colts and Six Yearling Heifers.

That said C. D. Coddington, in consideration thereof, shall pay said A. B. Johnson Three Hundred Dollars, upon the delivery of said property.

In witness whereof we have this day set our hands and seal.

A. B. Johnson.

C. D. Coddington.

A Contract for Laying Tile or Building Fence.

(SHORT FORM.)

THIS AGREEMENT, made this first day of July, A. D., 1891, between H. C. Naumann and G. C. Gasser, witnesseth that :

H. C. Naumann agrees to lay one hundred twenty (120) rods of six inch tile at forty cents (40c) per rod. The average depth and fall of said tile is to be sufficient to drain the land through which said tile may be laid, and G. C. Gasser shall direct place and parts of land to be drained by the above specified number of rods of tile.

H. C. Naumann,
G. C. Gasser.



A Contract for Hiring a Farm Hand.

THIS AGREEMENT WITNESSETH :

That Fred J. Dolan agrees to work faithfully for E. E. Heidner, as a general laborer on his farm, and to do any work that he may be called upon to do in connection therewith, in the township of Freedom, County of La Salle, and State of Illinois, for the period of one year, beginning the first day of March next, 1890, for the sum of Twenty Dollars per month.

In consideration of the services to be performed, the said E. E. Heidner agrees to pay Fred J. Dolan, Twenty Dollars per month.

IN WITNESS WHEREOF, the said parties have hereunto set their hands this first day of January, 1890.

Fred J. Dolan.
E. E. Heidner.

A Contract for Renting a Farm.

I, John Smith, do agree to demise and lease unto J. T. Hoge, his heirs and assigns the N $\frac{1}{2}$ of the SE $\frac{1}{4}$ of Sec. 25 in the town of Flag Springs, County of Andrew, and State of Missouri, for a term of two years from the first of March next, upon the payment of Three Hundred Dollars (\$300), as follows: One Hundred and Fifty the 20th of June next, and the remaining One Hundred and Fifty the first day of the following December.

Witness my hand, this 20th day of October, 1891.

John Smith.



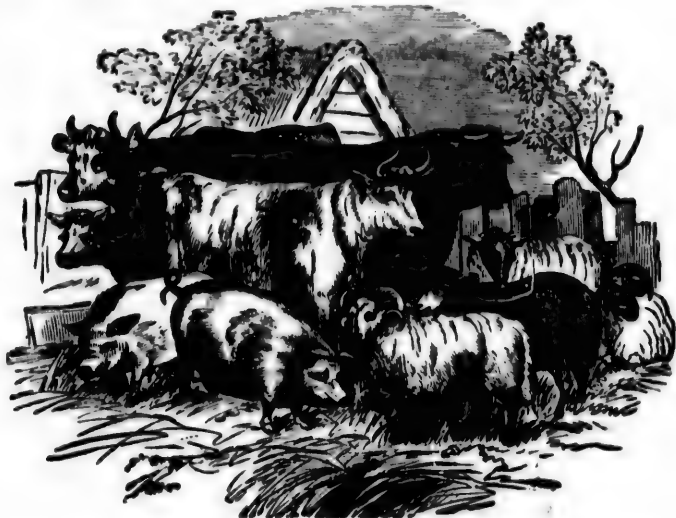
AN AGREEMENT TO BUILD A HOUSE.

ARTICLES OF AGREEMENT made and entered into this 16th day of May, 1891, between John Read and Z. Cooper, it is agreed in manner and form following, to wit: The said Z. Cooper, for the consideration hereinafter named, does, for himself, his heirs, executors, and administrators, covenant, promise, and agree, to and with the said John Read, his heirs, executors, administrators and assigns, that he, the said Z. Cooper, shall and will, within the space of six months, next after the date hereof, in a good and workmanlike manner, and according to the best of his art and skill, well and substantially erect, build and finish, one house, according to the draft or plan and specifications hereunto annexed, and to compose the same with such stone, brick, timber or other materials, as the said John Read, or his assigns shall provide and find for the same. In consideration whereof, the said John Read doth, for himself, his heirs, executors, and administrators, covenant and promise to, and with the said Z. Cooper, his heirs, executors, administrators, and assigns, well and truly to pay, or cause to be paid, unto the said Z. Cooper, the sum of Two Thousand Dollars.

In witness whereof we have hereunto set our hands and seals.

John Read. [Seal.]

Z. Cooper. [Seal.]



The Law Governing the Sale and Transfer of Personal Property.

1. A sale is the exchange of property for money, which is either paid at once or to be paid in the future.

2. There are many complicated things pertaining to the sale of property which every thoughtful man should understand.

3. The thing sold must either exist at the time of the sale or there must be a well-founded reason that it will be in existence and in possession of the seller. For example: If a man sold a horse for \$100 and it transpires that the horse died before the actual time of the sale the transaction would not be a sale, otherwise it would.

4. Grain or other produce not yet sowed or planted can be sold because the seller may reasonably expect a crop. Machinery or other manufactured goods may be sold before they are made and the seller can be made to perform his part of the contract the same as though the articles actually existed at the time of the sale.

5. The thing sold must be specified and set apart as the property of the buyer. For example: The sale of ten bushels of wheat from a certain bin would not be a sale unless the grain was measured and set apart.

6. The price must be fixed by mutual consent, or be understood by the terms of the sale.

7. Any defects which can be seen in property or in animals when sold does not relieve the buyer from meeting his contract though he claims he did not see the defects. *The law does not furnish eyes for the purchaser of property. Caveat emptor.*

8. But defects in property or animals which cannot be seen, and the seller makes no statement in reference to such defects, but recommends it as good or sound, relieves the buyer from fulfilling his part of the contract.

9. When nothing is said as to the time of payment when the sale is made the law presumes that the property must be paid for before the purchaser can secure possession. If credit is agreed upon the buyer is entitled to immediate possession.

10. The purchaser, in order to make good his bargain, should always advance a small amount, to bind the seller to the bargain.

Agreement for Sale of Grain.

MEMORANDUM OF AGREEMENT made the 1st day of March, 1892, between Ralph Ogilvy of the City of Ottawa, Commission Merchant, and Robert Hillyard of the Town of Prescott, Agent, witnesseth that the said Ralph Ogilvy agrees to sell to the said Robert Hillyard, 2,000 bushels of oats, A 1 quality, to be delivered to said Robert Hillyard at the Canadian Pacific Railway Station, Prescott, on or before 1st April next, at the price of 70 cents per bushel free of all charge. And the said Robert Hillyard agrees to buy said quantity of oats at said price and to pay for same thirty days after delivery. And the said Ralph Ogilvy hereby warrants and guarantees the quality of said oats as aforesaid.

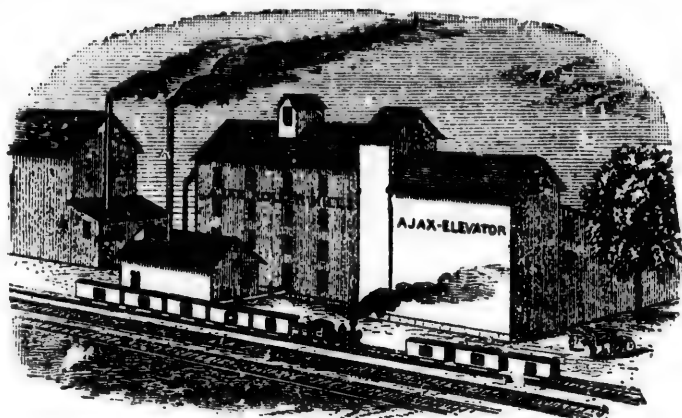
As witness our hands the day and year aforesaid.

Witness :

W. Heynan.

R. Ogilvy,

R. Hillyard.



HOW TO WRITE A LEASE.

RULE.—*The party granting the possession and profit is called the LESSOR, and the party to whom the grant is made is called the LESSEE.*

A Lease is a contract to be performed by both parties, and hence they both should sign it.

It is proper and best to have two copies of the lease (both alike), so that each party may hold a copy of the original agreement.

Write the lessor's name first, and his name should be signed first at the close.

Payments of rent should be entered on the back of the lease.

Care should be exercised in giving the **TIME, DESCRIPTION** and the **AMOUNT TO BE PAID.**

1. A **LEASE** is a contract by which a party gains the possession, use and profit of lands and tenements, in return for which he pays the owner thereof a recompense, called rent.

2. A lease must always give a less interest in land than that of the lessor. If lessor conveys his whole interest, it is an assignment or conveyance.

3. A lease of lands and tenements may be by written or verbal contract, except that there cannot be a verbal lease for a longer period than one year.

4. A lease of lands and tenements in Ontario and New Brunswick, exceeding three years must be by deed, and if for seven years it must also be registered.

5. A written lease cannot be changed by verbal agreement made at the same or another time. When parties reduce their agreements to writing, they are bound by the writing as against any verbal declarations.

6. If no time is stated when the rent is to be paid, it is not due till the end of the lease.



AGREEMENT TO CULTIVATE LAND ON SHARES.

THIS AGREEMENT, made this first day of March, one thousand eight hundred and ninety-one, between H. M. Schrepfer, of the town of Cohoctah, in the County of Livingstone, State of Michigan, party of the first part, and Richard Brown, of the City of La Salle, in the County of La Salle, and State of Illinois, party of the second part.

The party of the second part agrees to cultivate the land in good, workmanlike manner, keep the land free from noxious weeds, haul out the manure, and keep the fences in repair, the party of the first part to furnish the material.

The said Richard Brown is to deliver at the residence of the party of the first part, one-half of all the grain and hay raised on the farm of the party of the first part, and pay \$4.00 per acre for the land which he feeds as pasture.

This lease to hold good from March 1st, 1891, to March 1st, 1892.

H. M. Schrepfer.
Richard Brown.

Witnesses: { Anna Holverson.
 { Olive M. A. Weis.

**ONTARIO SHORT HOUSE LEASE.**

THIS INDENTURE, made the Tenth day of May, in the year of our Lord one thousand eight hundred and ninety-two, in pursuance of the Act respecting Short Forms of Leases : Between John Tytler of the City of London, Esquire, hereinafter called the lessor of the first part ; and William Milne of said City of London, Merchant, hereinafter called the lessee of the second part ; Witnesseth, that in consideration of the yearly rents, covenants, and conditions hereinafter respectively reserved and contained by the said lessee, his executors, administrators, and assigns, to be respectively paid, observed, and performed he, the said lessor hath demised and leased, and by these presents doth demise and lease unto the said lessee all that certain household premises known and described as Number 24. Brunswick Crescent in the City of London, together with all the rights, members, and appurtenances whatsoever to the said premises belonging or appertaining ; to have and to hold the said hereby demised premises, with their appurtenances, unto the said lessee, executors, administrators and assigns, for the term of five years, to be computed from the tenth day of May, one thousand eight hundred and ninety-two, yielding and paying therefor, unto the said lessor,

his heirs or assigns, the clear yearly rent or sum of Four hundred dollars of lawful money of Canada, in even portions, quarterly, on the tenth days of August, November, February and May, in each and every year during the continuance of the said term, without any deduction, defalcation or abatement whatsoever; the first payment to be made on the tenth day of August next. And the said lessee for himself, his heirs, executors, administrators, and assigns, hereby covenant with the said lessor, his heirs and assigns, to pay rent, and to pay taxes, and to repair; And that the said lessor may enter and view state of repair; And that the said lessee will repair according to notice; And will not assign or sub-let without leave; And will not carry on any business that shall be deemed a nuisance on the said premises; And that he will leave the premises in good repair.

And also, that if the term hereby granted shall be at any time seized or taken in execution, or in attachment, by any creditor of the said lessee or if the said lessee shall make any assignment for the benefit of creditors, or becoming bankrupt or insolvent shall take the benefit of any Act that may be in force for bankrupt or insolvent debtors, the then current quarter's rent shall immediately become due and payable, and the said term shall immediately become forfeited and void.

And it is hereby declared and agreed that in case the premises hereby demised or any part thereof shall at any time during the term hereby granted be burned down, or damaged by fire, so as to render the same unfit for the purposes of the said lessee, then and so often as the same shall happen the rent hereby reserved, or a proportionate part thereof, according to the nature and extent of the injury sustained, and all remedies for recovering the same, shall be suspended and abated, until the said premises shall have been re-built or made fit for the purposes of the said lessee.

Proviso for re-entry by the said lessor on non-payment of rent, whether lawfully demanded or not; or on non-performance of Covenants; or seizure or forfeiture of the said term for any of the causes aforesaid.

The said lessor covenants with the said lessee for quiet enjoyment.

In Witness whereof, the said parties have hereunto set their hands and seals.

Signed, Sealed and Delivered
in the presence of
W. G. Mardoch.

John Tytler, (Seal.)
Wm. Milne. (Seal.)

SHORT FORM OF LEASE.

John Parks leases to J. B. Moulton (description of premises)
for a term of.....upon the payment of.....Dollars.

Dated this 1st day of August, 1891.

J. K. Miller.

A LEASE—FOR CASH RENT.

THIS INDENTURE, made this *Fifth* day of *February*, A.D. 1884, between *Samuel E. Sport*, of the Town of *Naperville*, in the County of *Du Page* and State of *Illinois*, of the one part, and *James R. Giddings*, of the Town of *Lisle*, in the County and State aforesaid, of the other part :

WITNESSETH, That the said *Samuel E. Sport*, for the consideration hereinafter expressed, hath demised and leased, and doth by these presents hereby demise and lease unto the said *James R. Giddings* and his assigns lots one (1) two (2) and three (3) in block (7) of the original Town of *Naperville*, as shown by the plat of said town on file in the Recorder's office of the said *Du Page* County. And also the Northwest quarter (N. W. $\frac{1}{4}$) of Section Eight (8) in Township Twenty (20), Range Nine (9), East of the 3rd Principal Meridian, and containing one hundred and sixty (160) acres according to government survey. All aforesaid real estate being situate in the County of *Du Page* and State of *Illinois*, together with all the privileges and appurtenances thereunto belonging. TO HAVE AND TO HOLD the above described premises for and during the term of five years from the date hereof.

And the said *James R. Giddings* doth covenant and agree to pay the said *Samuel E. Sport*, or his heirs, executors or administrators, the sum of *One thousand* Dollars, as yearly rent for said premises, in 2 equal payments of *Five Hundred* Dollars each, at the expiration of each and every *six* months from date, during the continuance of this Lease.

IN WITNESS WHEREOF, The said parties have to this and one other instrument of the same tenor and date interchangeably set their hands and seals, the day and year first above written.

Signed, Sealed and Delivered
in Presence of

J. H. Nichols.

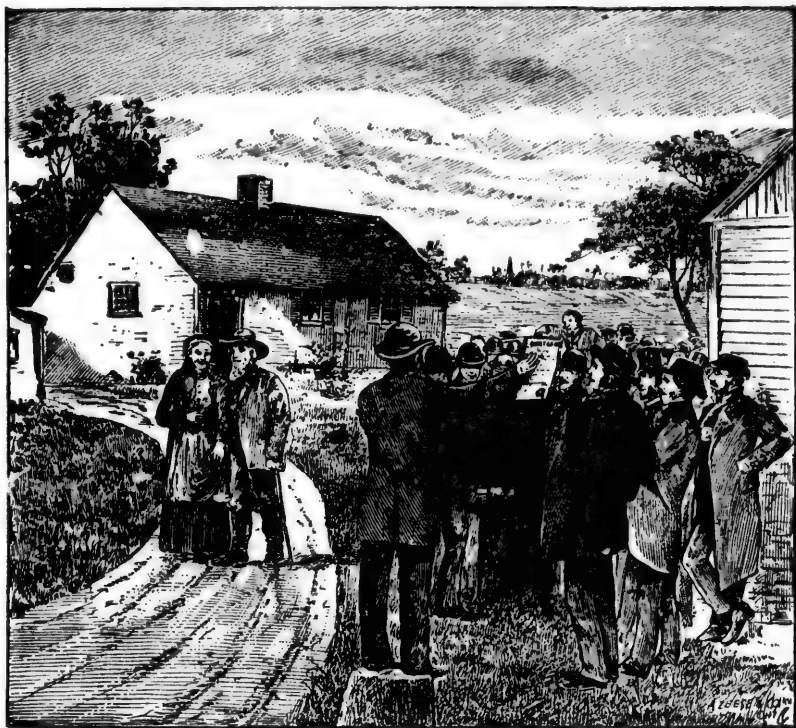
Samuel E. Sport. (Seal.)

James R. Giddings. (Seal.)

SECURITY FOR RENT.

For value received I hereby enter myself security for the full payment of the rent reserved in the within lease, and guarantee the payment of the rent and full performance of all covenants contained herein by the said party of the second part.

FRED A. LUEBEN



A MORTGAGE SALE.

They mortgaged their farm to start their son in business.
 "Now over the hill to the poor-house."

HOW MORTGAGES ARE WRITTEN.

RULES:—*Mortgages must be in writing, and must be in one single document, which contains the whole contract.*

It must be acknowledged and recorded.

When a mortgage is paid, or satisfaction given, it may either be written on the margin of the mortgage or by a receipt indorsed upon the mortgage, or it may be discharged upon the records whenever there is presented to the proper officers an instrument acknowledging satisfaction, executed by the mortgagor or his proper representatives.



THE MAN WHO PAYS HIS MORTGAGE AT THE DAY OF MATURITY.

THE LAW GOVERNING MORTGAGES.

1. Mortgages are conditional conveyances of estates or property by way of pledge to secure a debt, and become void upon the satisfaction of the indebtedness.

2. All mortgages must be in writing, and be signed and sealed.

3. There are two kinds of mortgages : a real estate mortgage, and a chattel mortgage. The former is a mortgage on real estate, the latter a mortgage on personal property.

4. A mortgagee may sell or transfer his mortgage to another party.

5. Mortgages given with the intent to defraud creditors are void, as to all persons knowing of the fraudulent intent.

6. When the debt is paid for which the mortgage was given, the mortgage is void.

7. A foreclosure is the legal proceeding to sell the mortgaged property to satisfy the debt.

8. Mortgages should be recorded with promptness after their execution. The first mortgage on record is the first lien on the property, notwithstanding another mortgage was given first, as to all persons not aware of that fact.

9. A mortgage on real estate is released in Ontario by the execution and registration of a Statutory Discharge of Mortgage.

10. *In writing mortgages always insert the same description of land and lots as given in the deeds of same property.*

ONTARIO SHORT FORM OF MORTGAGE.

THIS INDENTURE made the first day of February, one thousand and eight hundred and ninety-two, in pursuance of The Act respecting Short Forms of Mortgages, between John T. White of the City of Belleville in the County of Hastings, Builder, hereinafter called the Mortgagor of the First Part, Amy White his wife of the Second Part, and Edward R. Wood of the City of Toronto in the County of York, Accountant, hereinafter called the Mortgagee of the Third Part. Witnesseth that in consideration of One thousand dollars of lawful money of Canada, now paid by the said Mortgagee to the said Mortgagor, the receipt whereof is hereby acknowledged, he the said mortgagor doth grant and mortgage unto the said mortgagee, his heirs and assigns forever: All and singular that certain piece or parcel of land and premises situate, lying and being in the City of Belleville, in the County of Hastings, and composed of Lot number Twenty (20) on the north side of Stanley Street, according to registered Plan 79 for said City of Belleville. And the said Amy White, the wife of the said John T. White, hereby bars her dower in the said lands. Provided this mortgage to be void on payment of One thousand dollars of lawful money of Canada and interest thereon at the rate of six per centum per annum, as follows: The said principal sum of One thousand dollars in two years from the date hereof and interest thereon at the rate aforesaid, payable half-yearly on the first days of February and August. Interest overdue to bear interest at said rate, and taxes and performance of statute labor. The said mortgagor covenants with the said mortgagee that the mortgagor will pay the mortgage money and interest and observe the above proviso. That the mortgagor has a good title in fee simple to said lands, And that he has the right to convey the said lands to the said mortgagee, And that on default the mortgagee shall have quiet possession of the said lands free from all encumbrances, And that the said mortgagor will execute such further assurances of the said lands as may be requisite, And that the said mortgagor has done no act to encumber the said lands, And that the said mortgagor will insure the buildings on the said lands to the amount of not less than One thousand dollars currency, And the said mortgagor doth release to the said mortgagee all his claims upon the said lands subject to the said proviso. Pro-

vided that the said mortgagee on default of payment for two months may on one months notice enter on and lease or sell the said lands. Provided that the mortgagee may distrain for arrears of interest. Provided that in default of payment of the interest hereby secured, the principal hereby secured shall become payable. Provided that untill default of payment the mortgagor shall have quiet possession of the said lands.

In witness whereof the parties hereto have hereunto set their hands and seals.

Signed Sealed and delivered
in presence of

John T. White, (Seal.)

Amy White. (Seal.)

Jas. A. Wickett.

AFFIDAVIT.

ONTARIO, COUNTY OF } I, James Alfred Wickett of the
HASTINGS, To Wit: } City of Belleville, in the County of
Hastings, Builder, make oath and say :

1. That I was personally present and did see the within Instrument and duplicate thereof duly signed, sealed and executed by John T. White and Amy White, two of the parties thereto.

2. That the said Instrument and duplicate were executed at the said City of Belleville.

3. That I well know the said parties.

4. That I am a subscribing witness to the said Instrument and duplicate.

Sworn before me at the City of Belleville }
in the County of Hastings this 2d day of } Jas. A. Wickett.
February, A. D. 1892.

J. A. Wills,

A Commissioner, etc.

DISCHARGE.

TO THE REGISTRAR OF THE COUNTY OF LEEDS :

I, Joseph Deacon of the Town of Brockville, Esquire, do certify that Carl Pearl of the said Town of Brockville, Carpenter, hath satisfied all moneys due on a certain mortgage made by said Carl Pearl to me, dated 23rd May, 1890, and registered in the Registry Office for the County of Leeds on the 24th day of May, 1890, at 10 minutes past 11 o'clock in the forenoon, in Liber 3 H for the Town of Brockville, as No. 4579 B., that such mortgage has not been assigned, that I am the person entitled by law to receive the money, and that such mortgage is therefore discharged.

Witness my hand this 1st day of June, 1892.

Witness :

Arthur Elliott,

Joseph Deacon,



THE MAN THAT NEVER PAYS A MORTGAGE.

HOW TO WRITE A CHATTEL MORTGAGE.

Use a legal printed form or write one like the copy given below.

A Chattel Mortgage is a mortgage on personal property, such as live stock, machinery, farm implements, furniture, etc.

1. A chattel mortgage must be acknowledged by an affidavit of *bona fides* before a Judge, Justice of the Peace, Notary Public, or Commissioner for taking affidavits in the County in which the mortgagor resides.

2. The mortgage, if made in Ontario, which is not accompanied by an immediate delivery and an actual and continued change of possession of the things mortgaged, or a true copy thereof, shall, within five days from the execution thereof, be registered in the office of the Clerk of the County Court of the County where the property is situated.

3. Chattel mortgages may not run longer than one year as against creditors or subsequent purchasers, unless renewed by statement with affidavit.

4. A chattel mortgage is like a pledge in that the debtor may become entitled to the property by paying the debt; they are unlike in that in a chattel mortgage, if the debt is not paid, the property becomes the creditor's, and the debtor is not entitled to any surplus.

5. A chattel mortgage is a conditional sale of property, if the debt for which it was given is not paid.

6. A pledge is not a sale, it only gives the right to sell to some one else if the debt is not paid.

7. The property must be taken possession of by the mortgagee on the maturity of the mortgage, or it can be taken by other creditors.

8. The same form of discharge may be used in discharging a chattel mortgage as is used in discharging a mortgage on real estate.

9. In the Province of Quebec chattel mortgages are not recognized, though a creditor can have a lien on chattels by keeping them in his own possession.

CHATTEL MORTGAGE.

THIS INDENTURE, made (in duplicate) this 1st day of July, 1892, between Fred. F. Pole, of the town of Chatham, the Mortgagor, and John Tytler, of the city of London, the Mortgagee;

WITNESSETH, that the mortgagor in consideration of one hundred dollars of lawful money of Canada, to him paid by the said mortgagee, at or before the delivery hereof (the receipt whereof is hereby acknowledged), doth hereby grant, bargain, sell and assign to the said mortgagee, his executors, administrators and assigns, all and singular the following goods and chattels, being one bay mare, 4 years old, one wagon, one set of double harness, and all my household furniture of every description in my house on Nelson Street, in said town of Chatham; TO HAVE AND TO HOLD the said goods and chattels unto the said mortgagee, his executors, administrators and assigns to the his and their only use forever; *Provided* always that if the mortgagor, his executors or administrators shall pay or cause to be paid to the said mortgagee, his executors, administrators or assigns one hundred dollars in one year from the date hereof, with interest thereon at eight per cent. per annum, then these presents and everything herein contained shall become cease, determine and become utterly void to every intent and purpose. And the said mortgagor for himself, his executors and administrators, shall and will warrant and forever defend by these presents the said goods and chattels unto the said mortgagee, his executors, administrators and assigns.

And the said mortgagor doth hereby for himself, his executors and administrators, covenant with the said mortgagee, his executors, administrators and assigns, that he or they will pay the money hereby secured in the manner above stated, and also in case default shall be made in payment as aforesaid or any part thereof, or in case the mortgagor shall attempt to sell any part of the said goods and chattels, or to remove the same out of the County of Kent, or suffer the same to be seized or taken in execution, then it may be lawful for the said mortgagee, his executors, administrators and assigns, his or their servants or agents, at any time during the day to enter into any lands or houses where the said goods may be, and for such person to break or force open any doors, bolts or fastenings, fences or enclosures, for the purpose of taking possession of and removing said goods, and may thereafter sell all or any part thereof at public auction or private sale, and out of the proceeds of such sale to pay such sums of money as may be due him hereunder, and all lawful expenses incurred thereby in consequence of such default as above mentioned, and to pay over to said mortgagee any surplus remaining after such sale and payment; or in case of deficiency, then that the said mortgagor, his executors or administrators will pay the same to the said mortgagee, his executors, administrators or assigns. Provided always that it shall not be incumbent to make such sale as aforesaid, but the said mortgagee, his executors, administrators or assigns, may peaceably hold, use and possess said goods and chattels without the hindrance of any person whomsoever.

IN WITNESS WHEREOF, the parties hereto have hereunto placed their hands and seals.

Witness:

F. F. POLE. [SEAL.]

J. M. NASH.



BILL OF SALE.

THIS INDENTURE, made the 2nd day of May, 1892, between John Harris of the Township of King, Farmer, the grantor, and Wesley Richardson of the Village of Pennville, Dentist, the grantee, Witnesseth that in consideration of Five hundred dollars (\$500.00), paid by said grantee to said grantor, the receipt of which is hereby acknowledged, the said grantor doth hereby grant, sell, transfer and deliver to said grantee, his heirs, executors, administrators and assigns, all and singular the following goods and chattels, namely :

1 Black Horse @ \$150.00	- - - -	\$150.00
2 Sets Harness @ 25.00	- - - -	50.00
1 Carriage @ \$200.00	- - - -	200.00
1 Wagon @ \$40.00	- - - -	40.00
2 Cows @ \$30.00	- - - -	60.00
		<hr/>
		\$500.00

To have and to hold the said goods and chattels and all right, title and interest therein to the said grantee, his heirs, executors, administrators and assigns absolutely forever. The said grantor for himself, his heirs, executors, and administrators covenants with the said grantee, his heirs, executors, administrators and assigns that he is now rightfully possessed of said goods and chattels and hath the right to transfer the same to the said grantee. That the said grantee shall peaceably have, hold and possess the same free of all claim, charge, demand and encumbrance whatsoever, and that the said grantor will indemnify and save harmless the said grantee from other lawful grants, charges and encumbrances, and that he will execute such further assurances and do such acts for effectually assuring the said goods and chattels to the said grantee,

as may be reasonably required by him at the cost of said grantee. In witness whereof the said parties hereto have hereunto set their hands and seals.

Witness : **John Harris,** (**Seal.**)
 John Hood. **Wesley Richardson.** (**Seal.**)

AFFIDAVIT.

COUNTY OF YORK. } I, Wesley Richardson of the Village
To Wit: } of Pennville, Dentist, the Grantee in
the foregoing Bill of Sale named, make oath and say :

That the sale therein made is *bona fide*, and for good consideration, namely \$500 00, and not for the purpose of holding or enabling me, this deponent, to hold the goods mentioned therein against the creditors of the said grantor.

Sworn before me at the City of }
Toronto, in the County of York, this } W. Richardson.
2d day of May, 1892.

J. E. Hansford,
A Commissioner.

ASSIGNMENT OF MORTGAGE.

THIS INDENTURE made, in duplicate, this 1st day of July, 1892, between Edward R. Wood of the City of Toronto, Accountant, the Assignor, and James G. Foster of the City of Halifax, Esquire, the Assignee.

Whereas by a mortgage dated the first day of February, 1892, John T. White did grant and mortgage the lands therein described to Edward R. Wood, his heirs and assigns for securing payment of One thousand dollars and interest at six per cent., and there is now owing on said mortgage One thousand dollars and interest from the date thereof. Witnesseth that in consideration of One thousand and five dollars of lawful money of Canada, now paid by the said assignee to the said assignor (the receipt whereof is hereby acknowledged), the said assignor doth hereby assign and set over unto the said assignee, his executors, administrators and assigns, all that the said before in part recited mortgage, and also the said sum of One thousand dollars and interest now owing as aforesaid, and the full benefit of all powers, covenants and provisions therein contain and also full power and authority to use the name of the said assignee, his heirs, executors, ad-

ministrators and assigns for enforcing performance of the covenants therein contained, and doth hereby grant to the said assignee, his heirs and assigns all and singular that certain parcel of land and premises situate, lying and being in the City of Belleville, in the County of Hastings and composed of Lot number Twenty (20) on the North side of Stanley Street, according to registered Plan 79 for said City of Belleville. To have and to hold the said mortgage and the moneys thereby secured and also the said lands to the use of the said assignee, his heirs and assigns forever, subject to the terms therein contained. And the said assignor for himself, his heirs, executors and administrators doth hereby covenant with the said assignee, his heirs, executors, administrators and assigns that the said mortgage hereby assigned is a good and valid security, and that the said sum of One thousand dollars and interest is now owing and unpaid and that he has not done or permitted any act, matter or thing whereby the said mortgage has been released or discharged either partly or in entirety, and that he will upon request do, perform and execute every act necessary to enforce the full performance of the covenants and other matters contained therein.

In Witness whereof the parties hereto have hereunto set their hands and seals.

Witness:

E. R. Wood. (Seal.)

Peter Jones.

STATUTORY FORM OF DISCHARGE OF MORTGAGE.

To the Clerk of the County Court of the County of ———:

I, E. R. Wood, of the city of Toronto, accountant, do certify that John T. White has satisfied all money due on a certain Chattel Mortgage made by him to me, which mortgage bears date the 1st day of February, 1892, and was registered in the office of the clerk of the County Court of the County of York on the 4th day of February, 1892, as No. 572; that such mortgage has not been assigned; that I am the person entitled by law to receive the money, and that such mortgage is therefore discharged.

Witness my hand this 31st day of January, 1893.

Witness: G. L. LENNOX,

C. R. WOOD,

Solicitor, Toronto.



HOW TO WRITE A DEED.

RULES.—1. *It must be written or printed on paper or parchment and sealed.*

3. *The date, names of the parties and place of residence are written first.*

3. *The property must be fully described. The description should be by stating the number of the Lot, Concession, Township and County, and registered number of the surveyor's plan, if any. If a portion only is to be conveyed, it should be more particularly described, as by metes and bounds, or the North half of the lot, etc.*

4. *It must express a consideration, and be signed and sealed by the grantor or grantors.*

CAUTION.—It must be completely written before delivery. Numbers should always be written in *words*. If the grantor is married, his wife should join in the deed and bar her dower in all Provinces where she is entitled to dower. Where forms are prescribed by the Statutes of a Province, they must be followed. Deeds should be drawn in duplicate (two copies), one of which should be filed in the Registry Office and a Certificate of registration endorsed on the other copy by the Registrar. Care should be taken to have all parties interested in the land join in the conveyance thereof, and to have their signatures properly verified by affidavit.

THE LAW GOVERNING DEEDS.

1. The affidavit verifying the execution of a deed can only be made before certain persons authorized to take the same, such Justices of the Peace, Notaries, Judges and Commissioners, etc.

2. A deed without consideration is void.

3. Any person of legal age, competent to transact business, and owning real estate, may convey it by deed.

4. The deed takes effect upon its delivery to the person authorized to receive it, and should be recorded at once.

5. After the acknowledgement of a deed the parties have no right to make the slightest alteration.

6. The person making the deed is called the *grantor*, the person to whom the deed is delivered is called *grantee*.

A QUIT CLAIM DEED releases only what interest the grantor has in the property to the grantee, who must already have some interest in the land.

8. Never purchase real estate without a careful examination of the title, either by yourself or a trusty Solicitor.

ONTARIO SHORT FORM DEED OF CONVEYANCE.

THIS INDENTURE, made (in duplicate) the.....day of.....one thousand eight hundred and ninety.....in pursuance of The Act respecting Short Forms of Conveyances, between John Smith of the Township of King, in the County of York, Yeoman, of the first part; Ann Smith, his wife, of the second part; and Peter Jones of the said Township of King, Cooper, of the third part; Witnesseth that in consideration of One thousand dollars of lawful money of Canada now paid by the said party of the third part to the said party of the first part (the receipt whereof is hereby by him acknowledged), he the said party of the first part doth grant unto the said party of the third part in fee simple: All and singular that certain parcel or tract of land and premises situate, lying and being in the Township of King, in the County of York and being the North half of lot number Ten in the Fifth Concession of the said Township of King, containing by admeasurement fifty acres more or less. To have and to hold unto the said party of the third part, his heirs and assigns, subject to the reservations, limitations,

provisoes and conditions expressed in the original grant thereof to the Crown; The said party of the first part covenants with the said party of the third part that he has the right to convey the said lands to the said party of the third part, notwithstanding any act of the said party of the first part; And that the said party of the third part shall have quiet possession of the said lands free from all encumbrances. And the said party of the first part covenants with the said party of the third part that he will execute such further assurances of the said lands as may be requisite; And the said party of the first part covenants with the said party of the third part that he has done no act to encumber the said lands. And the said party of the first part releases to the said party of the third part all his claims upon the said lands: And the said Ann Smith, the wife of the said John Smith, hereby bars her dower in the said lands.

In witness whereof, the said parties hereto have hereunto set their hands and seals.

Signed, Sealed and Delivered
in presence of
Robt. Brown.

John Smith, (Seal)
Ann Smith. (Seal)

AFFIDAVIT.

ONTARIO, COUNTY OF } 1. Robert Brown, of the Township
YORK, To Wit: } of King, in the County of York,
Blacksmith, make oath and say:

1. That I was personally present and did see the above instrument and duplicate thereof duly signed, sealed and executed by John Smith and Ann Smith, two of the parties thereto.

2. That the said instrument and duplicate were executed at the City of Toronto in the County of York.

3. That I know the said parties.

4. That I am subscribing witness to the said instrument and duplicate.

Sworn before me at the City of }
Toronto, in the County of York, this } Robert Brown.
18th day of September, A. D. 1892.

J. E. Mansford,

A Commissioner, etc.



HOW TO WRITE A WILL.

RULE.—*Use simple language, and state fully and plainly all the particulars concerning every portion or condition of the will.*

THE LAW OF WILLS.

1. All persons of sound mind and memory, of lawful age, freely exercising their own will, may dispose of their property by will.
2. "Lawful age" is 21 years, in both male and female.
3. All wills should be in writing on paper or parchment.
4. No exact form of words is necessary to make a will good at law.
5. The maker of a will if male, is called a *testator*; if female, *testatrix*.
6. Any person who dies without having made a valid will is said to have died *intestate*. The property will then be distributed according to the laws of the Province in which it is situated by a person appointed by the Surrogate Court, called an *Administrator*. Though commonly used, a seal is not essential to a will.

7. A will has no force or effect until after testator's death.

8. The last will annuls all former wills.

9. A wife cannot be deprived of her dower, which is a life interest in one-third of her husband's real estate by will. A devise or bequest may be made to a wife in lieu of dower, but it must be clearly so expressed or she may become entitled to both.

10. Subsequent marriage revokes all wills made while single.

11. Testator's property is primarily liable for testator's debts and funeral expenses, which must be paid before any part of it can be distributed to legatees.

12. A will is good, though written with a lead pencil.

13. Wills must be signed in the presence of at least two witnesses who must sign in the presence of the testator and of each other. An executor is a competent witness.

14. A person who is competent to make a will can appoint his own executor. If the person so appointed is legally competent to transact business, the Surrogate Court will confirm the appointment. The person so appointed is not obliged to serve.

15. It is not necessary that the witnesses should know the contents of the will. It is necessary that testator acknowledge to them that it is his will, sign it in their presence, or acknowledge the signature already signed to be his, and request them to sign as witnesses: they should sign as witnesses in the presence of the testator and of each other.

16. Testator should write his own name in full. If unable to do so, his hand should be guided by another, and his name written, or a mark made near his name.

The following is the usual form when testator signs by mark.

his
John X Smith.
mark.

17. The executors must first prove the will and be appointed by the Surrogate Court of the County in which the testator resided at the time of his death.

18. A holograph will, one entirely written and signed by the testator, requires no particular form nor an attesting witness in Manitoba.

19. Executors are allowed one year in which to collect the assets and pay the debts before the payment of legacies can be enforced, though it is always well to perform the duties expeditiously.

20. Executors must keep a strict account of all dealings with the estate, or they will be held personally responsible. A devise or bequest to a witness, or to the husband or wife of such witness is invalid.

21. An addition to an executed will is called a codicil.

22. The same essentials apply to a codicil as to a will.

23. Legacies to subscribing witnesses are generally declared void.

GENERAL FORM OF WILL.

I, Andrew Kirk, of the Town of Owen Sound, Merchant, being of sound and disposing mind and memory, do make and publish this as my last will and testament, hereby revoking all former wills and testamentary dispositions heretofore at any time by me made.

I hereby appoint my brother, Alexander Kirk, and my son-in-law, John Ross, to be the executors of my will.

I hereby direct my said executors to pay all my just debts, funeral and testamentary expenses as soon as possible after my decease.

I hereby bequeath to my wife, Clara Kirk, Ten thousand dollars, the same to be in lieu of any claim she may have for dower.

I hereby devise my house and premises known as 49 Elm Avenue, in the Town of Owen Sound, to my wife, May Baker, during the term of her natural life, and after her decease to my son, Robert Baker, absolutely.

I devise and bequeath to my son, Robert Baker, and my daughter, Mary, the wife of John Ross, all the rest and residue of my real and personal estate in equal shares absolutely.

In witness whereof, I have hereto set my hand this 1st day of July, 1892.

Signed, sealed, etc., etc.

Andrew Kirk.



Make your will early in life—you know not what to-morrow may bring forth.

SHORT FORM OF WILL.

This is the last will and testament of Abel Baker, of the Village of Morrisburg, in the County of Dundas, Grocer. I give, devise and bequeath all my real and personal estate of every kind and description and wherever situated unto my wife, May Baker, her heirs and assigns absolutely forever, hereby appointing her the sole executrix of this my will. I hereby revoke all other wills and testamentary dispositions by me at any time heretofore made. I witness whereof, I have hereto set my hand this 24th day of May, 1892.

Signed, sealed, published and declared by said Abel Baker as and for his last will and testament in the presence of us present at the same time, who at his request, in his presence and in the presence of each other have hereunto subscribed our names as witnesses to the due execution hereof.

Abel Baker.

Thos. Morris, Morrisburg, Carpenter.
Wm. Croft, Iroquois, Tailor.



How to Write All Kinds of Guaranties.

1. A **GUARANTEE** is an assurance made by a second party that a certain party will perform a certain specific act.

2. A guarantee to be binding should be for a consideration.

3. All guarantees must be in writing.

4. A mere accommodation or overture is not sufficient to hold a guarantor.

5. A guarantee must be accepted to make it a contract, and the guarantor must have notice of its acceptance within a reasonable time.

6. A guarantor, after paying the debt, has the right to substitute himself in place of the creditor.

7. The terms of the contract of guaranty are to be strictly construed.

8. In the sale of a horse the purchaser can only hold the guarantor for defects of the horse when sold.

9. In case of a cough the horse must have been heard to cough previous to the purchase. If lame, the lameness must be proved to have arisen from a cause that could not have occurred after the purchase.

10. A guaranty after the sale of the horse to another is of no effect.

11. Any material alteration in the terms of the arrangement without the consent of the guarantor, will release him from liability; such as extending time for payment, etc.



How to Write a Guaranty for the Purchase of a Horse.

Osage, Kansas, June 30, 1891.

In consideration of One Hundred and Fifty Dollars, for a bay mare, I hereby guarantee her to be only six years old, sound, free from vice and quiet to ride or drive.

N. B. This guaranty embraces every cause of unsoundness that can be detected and the seller will be held for all the defects in the animal at the time of sale. This is the only safe and satisfactory way for a man to purchase a horse who is not an experienced judge of horses.

Another.

Dayton, Ont., Aug. 30, 1892.

W. Reinke, Esq.

Dear Sir:—I hereby guarantee the payment of any bill or bills of merchandise, Mr. Jno. A. Dahlem may purchase from you, the amount of this guarantee not to exceed five hundred dollars (\$500), and to expire at the end of three months from date. Respectfully yours,

Chas. Adams.

Guarantee of a Debt Already Incurred.

St. Louis, Mo., July 10, 1891.

Messrs. H. E. Bechtel & Co., West Salem.

Gentlemen:—In consideration of one dollar, paid me by yourselves, the receipt of which I hereby acknowledge, I guarantee that the debt of four hundred dollars now owing to you by Ira J. Ferry, shall be paid at maturity.

Very respectfully yours, William Metz.



How to Form a Partnership, and the Rules and Law.

1. Partnership is a voluntary contract between two or more persons, to place their property, labor or credit, or some or all of them, in some lawful business, to share the gains and losses in certain proportions

2. Where no time is specified, any partner may dissolve a partnership at will.

3. The death of any partner dissolves the whole firm.

4. Each partner has full authority to act for the firm.

5. Not only the common property, but also all the private property of each partner may be taken, to satisfy the debts of the firm.

6. Upon the dissolution the old partners are responsible to third persons for even new debts, unless such persons have had notice of the dissolution.

7. One partner may discharge himself from liability by giving express notice to any customer or other person, not to trust one or more of his co-partners.

8. A partner cannot make the firm responsible for his separate or private debt, nor bind the firm by entering into engagements unconnected with, or foreign to the partnership.

9. The contract of co-partnership may be made verbally or in writing. It is a serious engagement and easier to get into than to get out of. Every person should use great care in involving his property and business interests in a co-partnership, and where those interests are extensive, articles of co-partnership drawn by the best qualified lawyer available are the safest expedient, and will in all cases be a good investment.

10. Anyone who allows his name to be used, or who shares in the profits, is liable like a partner

Agreement to Dissolve a Partnership.

We, the undersigned, do mutually agree that the within mentioned partnership be, and the same is hereby dissolved, except for the purpose of final liquidation and settlement of the business thereof, and upon such settlement wholly to cease and determine.

Witness our hands and seals, this twenty-ninth day of May, eighteen hundred ninety-one.

Signed, Sealed and Delivered in
Presence of

Harvey U. Chester.
Porter L. Fields.

John H. Wagner. (SEAL)

Reuben H. Howard. (SEAL)

ARTICLES OF CO-PARTNERSHIP.

ARTICLES OF AGREEMENT, made December 3d, 1890, between John H. Wagner and Gregory Ross :

The said parties hereby agree to become co-partners, under the firm name of Wagner & Ross, and as such partners to carry on together the business of buying and selling all sorts of dry goods, at No. 547 Fulton street, in the city of Brooklyn.

The said John H. Wagner agrees to contribute two thousand dollars (\$2,000) to the capital of said firm ; and the said Gregory Ross agrees to contribute one thousand dollars (\$1,000) to the same ; the sum of \$2,500 of said capital to be expended in the purchase of a stock in trade.

The said Wagner shall have exclusive charge of all the buying for the firm.

All the net profits arising out of the business shall be divided in the following proportions, two-thirds to the said Wagner and one-third to the said Ross.

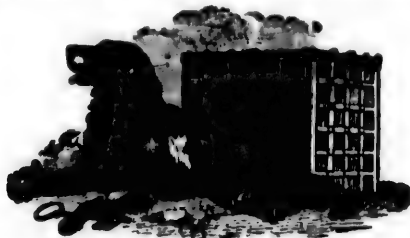
Each partner shall devote all his time, attention, and efforts to the said business.

Neither partner shall, without the consent of the other, sign any bond, bill or note as surety, or otherwise become obligated as security for any other person.

Witness the hands and seals of the parties hereto, this 1st day of January, A. D. 1891.

..... (SEAL)

..... (SEAL)



The Time in which Debts are Outlawed in Canada and the United States.

1. The time to sue varies in different Provinces and in different classes of cases from one to thirty years.

2. In accounts it generally begins from the purchase of the last item, and is renewed by every partial payment.

3. In case the debtor makes a written acknowledgement in a note, or papers of that character, the claim is renewed.

Canada: Accounts, notes, etc., 6 years; Judgments, bonds, etc., 20 years.

In Quebec: Notes, 5 years; Judgments, 30 years.

States and Territories.	Contracts in Writing.	Scaled Instruments.	Judgments.	Open Accounts.	States and Territories.	Contracts in Writing.	Scaled Instruments.	Judgments.	Open Accounts.
	YRS	YRS	YRS	YRS		YRS	YRS	YRS	YRS
Canada	6	20	20	6	Minnesota	6	10	10	6
New Brunswick...	6	20	20	6	Mississippi.....	6	7	7	3
Nova Scotia	6	2	...	6	Missouri	10	10	20	5
Alabama	6	10	20	3	Montana	10	10	10	5
Arkansas.....	5	5	10	3	Nebraska	5	5	5	4
Arizona.....	4	4	5	2	Nevada	6	4	5	2
California.....	4	4	5	2	New Hampshire..	6	20	20	6
Colorado.....	6	6	3	6	New Jersey.....	6	16	20	6
Connecticut.....	6	17	17	6	New Mexico.....	6	6	15	4
Dakota	6	20	20	6	New York.....	6	20	20	6
Delaware.....	6	20	20	3	North Carolina...	3	10	10	3
Dist. of Columbia.	3	12	12	3	Ohio	15	15	15	6
Florida.....	5	20	20	4	Oregon	6	10	10	6
Georgia.....	6	20	...	4	Pennsylvania.....	6	20	20	6
Idaho.....	4	4	5	2	Rhode Island.....	6	20	20	6
Illinois.....	10	10	20	5	South Carolina....	6	20	20	6
Indiana.....	20	20	20	5	Tennessee.....	6	10	10	6
Iowa.....	10	10	20	5	Texas.....	4	4	10	2
Kansas.....	5	5	15	3	Utah	4	4	5	2
Kentucky	15	15	15	5	Vermont.....	6	8	8	6
Louisiana.....	5	10	10	3	Virginia.....	5	20	20	5
Maine.....	6	20	20	6	Washington	6	6	6	5
Maryland.....	3	12	12	3	W. Virginia.....	10	10	10	5
Massachusetts.....	6	20	20	6	Wisconsin	6	20	20	6
Michigan	6	10	10	6	Wyoming	5	5	...	4

ONTARIO.

- (1) Bed, bedding and bedsteads in ordinary use.
- (2) Necessary and ordinary wearing apparel.
- (3) One cooking stove with pipes, 1 heating stove with pipes, sewing-machine. 30 vols. books, all spinning wheels and weaving looms, and a large number of articles of furniture, cooking utensils, etc., in all not to exceed the value of \$150.
- (4) All necessary fuel, meat, fish, flour and vegetables not more than sufficient for the ordinary consumption of debtor and family for 30 days, and not exceeding in value the sum of \$40.
- (5) One cow, 6 sheep, 4 hogs and 12 hens, in all not to exceed the value of \$75; also food for them for thirty days.
- (6) Tools and implements of, or chattels ordinarily used in the debtor's occupation, to the value of \$100.
- (7) Bees reared and kept in hives to the extent of fifteen hives.

QUEBEC.

NOVA SCOTIA.

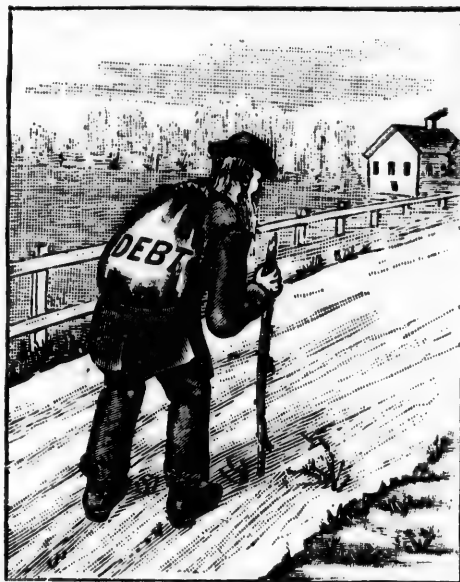
The necessary wearing apparel and bedding of the debtor and his family, and the tools or instruments of his trade or calling, one stove and his last cow, are exempted from execution.

NEW BRUNSWICK.

The wearing apparel, bedding, kitchen utensils and tools of his trade or calling to the value of \$100. The interest of the allottee in free grant land is exempt.

PRINCE EDWARD ISLAND.

The necessary wearing apparel and bedding of the debtor and his family and the tools or instruments of his trade or calling, \$25 in money and his last cow are exempt.



"HIS BURDEN OF DEBT HE BORE TO THE GRAVE."

HOW TO COLLECT DEBTS.

If no settlement can be reached by mutual agreement, and every effort has been exhausted for reaching a settlement, the next thing to do is to carry the matter into the courts and there have it adjusted according to law. But this method is both expensive and uncertain. A settlement, though not very satisfactory, is often better than the results which can be reached through the courts.

ONTARIO.

ARREST FOR DEBT, ABSCONDING DEBTORS—When a creditor has a claim of \$100 or over, and can show to the satisfaction of the Judge that he has such claim and that there is reasonable and probable cause for believing that the debtor is about to leave the province with intent to defraud his creditors, an order for arrest may be granted.

EXAMINATION OF JUDGMENT DEBTOR—The judgment debtor may be examined as to his property at the time debt is incurred, and the disposal of the same, and in the higher courts the transferee may also be examined. On examination in the Division Court the Judge may order the debtor to pay the debt in such way as he deems proper, and in default may issue an order for committal.

GARNISHMENT.—Debts over \$25 due the debtor may be attached in the Division Court at the time of the issue of the summons, but in the County Court and High Court only after judgment.

After judgment has been rendered, the money or goods due the defendant, if in the hands of a third person, may be attached to pay the plaintiff. The person in whose hands the money or goods attached are, is known in law as the garnishee or trustee.

ATTACHMENT.—This is a writ issued by the Justice of the Peace or Judge, or some other officer having jurisdiction, commanding the sheriff or constable to attach the property of the debtor, to satisfy the demands of the creditor. This writ may be issued at the beginning or during the suit. All attachments lose their validity in case the debtor (or defendant) wins the suit.

JUDGMENT AND EXECUTION.—A suit is ended by the courts giving a judgment, either in favor of the debtor or the creditor. If the judgment is in favor of the plaintiff and the defendant refuses to pay the amount of the judgment, an execution is issued by the court which commands the sheriff to take sufficient property of the defendant, if it can be found, to satisfy the judgment.

EXECUTION.—In the County Court and High Court execution may issue immediately upon entry of judgment, unless stayed by order of the Court or Judge. Writs of Execution must be renewed before the termination of a year from their date, and must be renewed each year following in like manner. Lands cannot be sold for one year from the time the writ is delivered to the sheriff, but debtors' lands are bound from date of delivery.

QUEBEC.

ASSIGNMENTS.—Any creditor for \$200 or over may make a demand of assignment on a debtor who does not pay, and if the latter refuses he may be arrested on a *capias*. The court, on the advice of the creditors, appoints a curator or trustee who realizes and divides the estate. The debtor is only discharged to the extent of the dividend.

ATTACHMENTS.—A *capias* against the person or an attachment against the property of a debtor, may issue before judgment on an affidavit by the creditor or his agent that the debtor is about to abscond or to secrete his property with intent to defraud his creditors, or that he is insolvent and refuses to assign.

EXECUTIONS.—Execution against goods and lands cannot issue until 15 days after judgment, except upon an affidavit similar to that for attachments above. Chattels can be sold after 8 days' notice and lands after two months.

MECHANICS' LIENS, HOMESTEAD EXEMPTIONS, NOTES, MORTGAGES, CONTRACTS, ETC., are explained under proper headings in other parts of the book.

THE CREDIT SYSTEM.

ITS ADVANTAGES AND DISADVANTAGES.

1. There are many good reasons why people should pay cash for everything purchased. Hopeful people will always buy more freely if they can get it on credit, and are never anxious about pay day to come around.

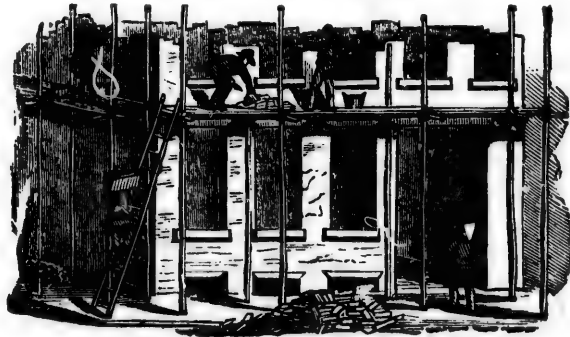
2. Remember that those who sell on credit *must charge from ten to fifteen per cent. more for goods* in order to cover the interest and risks. It has been found that from seven to ten per cent. of trusted out accounts become worthless.

3. It is always uncertain which of the trusted persons will fail to pay his account, and consequently all persons buying on credit have to share the extra prices, in order to meet the losses which all business men sustain that do a credit business.

4. Remember, the man who can pay cash for goods, or whatever purchases he may make, *can always secure a better bargain than the man who buys on credit.* It will therefore be a great saving if everyone could manage, by rigid economy if necessary, to pay cash for everything they buy. It would pay a high rate of interest on everything purchased.

5. Persons who buy real estate, or merchants who buy large quantities of goods, may often find it necessary to buy on credit. Many of our wealthiest farmers and business men made their money largely in having the benefit of credit, but at the same time, if cash could be paid for everything purchased, whether real estate or other articles, it would be a great saving to the purchaser.

6. *Keep your word as good as a bank and you will always have credit when you desire it, and friends when you need them.*



How to Secure a Mechanic's Lien on Property.

1. A *Lien* is a legal claim. It includes every case in which either real or personal property is charged with any debt or duty. Or in other words, it is the right to hold possession of property until some claim against it has been satisfied.

2. *Possession* is always necessary to create a lien except in case of real estate. The lien simply extends to the right of holding the property until the debt is satisfied.

3. The existence of a lien does not prevent the party entitled to it from collecting the debt or claim by taking it into Court.

4. Warehouse men, carpenters, tailors, dyers, millers, printers, etc., or and person who performs labor or advances money on property or goods of another has a lien on same until all charges are paid.

5. *Hotel Keepers* have a lien upon the baggage of their guests, whom they have accommodated.

6. *Common Carriers* have a lien on goods carried for transportation charges.

7. *Agents* have a lien on goods of their principal for money advanced.

8. *How to Hold the Lien.* Never give up possession of the property until the debt is paid.

9. *Real Property.* If the debt is on a house, barn or other real property, file a lien on the whole property, and have it recorded in the County Registry office. The claim then partakes of the nature of a mortgage.

10. *Mechanic's Lien.* Many of the Provinces have enacted special laws to protect mechanics who furnish materials for buildings which they erect for others. The lien must be registered within 30 days from the time the last work was done or material delivered and an action thereon must be commenced within 90 days from such time, otherwise the lien becomes extinct. The following form is the one generally used in Ontario:

FORM OF MECHANIC'S LIEN.

Thomas Bell, of the City of Hamilton, Bricklayer, under the Mechanic's Lien Act, claims a lien upon the estate of John Grant of said City of Hamilton, Contractor, in the undermentioned land in respect of 40 day's work performed thereon while in the employment of Peter Smith, of the City of Hamilton, Builder, on or before the 30th day of June, 1892. The amount claimed as due is for 40 day's wages at \$3.50 per day—\$140.00.

The following is a description of the land to be charged: Lot 5 and west half of Lot 6 on the west side of James Street, south according to Plan 408 filed in the Registry Office for the County of Wentworth.

Dated at Hamilton this 24th July, 1892.

Witness,
Adam Meyers.

THOS. BELL.

AFFIDAVIT VERIFYING CLAIM.

I, Thomas Bell, named in the above claim, do make oath that the said claim is true.

THOS. BELL.

Sworn before me at the City of Hamilton, }
in the County of Wentworth, this 24th day }
of July, 1892.

S. F. Lazier,
A Commissioner.

The agreement to refer matters in dispute to the decision of arbitrators is called a *submission*, and the terms of the agreement should be written out and signed by the disputing parties.

The decision of the arbitrators is called an *award*, which should be put into writing in distinct terms and signed by them.



LAWS OF THE PUBLIC ROADS.

1. **PUBLIC ROADS** are those which are laid out and supported by Crown or Municipal Councils. Their care and control is regulated by the statutes of the different Provinces, and in detail will not be referred to here, as they can be easily looked up by those who desire information so entirely local.

2. **OWNERSHIP**—The soil and the land remains in the Crown.

3. **LIABILITY**—The repair of highways is usually imposed upon the Municipalities, and they are made liable by statute for all damages, against persons or estates, from injuries received or happening in consequence of a neglect of duty on the part of the officers having the same in charge.

4. The opening or closing of highways is effected by the by-law of a Municipal Council.

5. **LAW OF THE ROAD**—Persons traveling with carriages or vehicles of transportation, meeting on any public way, it is customary to turn their carriages or wagons to the right of the center of the road, so far as to permit such carriages or wagons to pass without interruption.

6. **RUNAWAYS**—The owner of a runaway horse or horses, if negligent, or not exercising due care, is responsible for all damages that may occur.

7. Any unreasonable occupation of the public way, whether arising out of a refusal to turn out and allow a more rapid vehicle to pass, or from an unjustifiable occupancy of such a part of the road as to prevent others from passing, will render the party so trespassing liable for damages to any suffering injuries therefrom.

8. **PETITIONS** for laying out or changing on road or street are made to the Municipal Council.



How to Settle Difficulties by Arbitration.

Arbitration is an agreement by parties who have a controversy or difference to the decision of a third party.

Arbitration is one of the highest courts for the settlement of personal differences, and if people would only learn more of its benefits and advantages, lawyers by the thousands would not thrive and fatten upon the earnings of those who could make better use of their money.

When the matters in difference are simply those of fact, it is often more satisfactory to submit them to the decision of mutual friends, each contending party choosing one, and the two arbitrators thus chosen choosing the third, and the three parties thus chosen constituting the court.

The decision of the arbitrators is called an *award*.

The award should be specific and distinct containing the decision of the arbitrators in as clear and concise language as possible.

The following oath should be taken by the persons chosen to act as arbitrators or referees before entering upon the examination of the matters in dispute: We, the undersigned arbitrators, appointed by and between Henry Smith and Richard Brown, do swear fairly and faithfully to hear and examine the matters in controversy between said Henry Smith and

Richard Brown, and to make a just award, according to the best of our understanding.

P. D. Crimmins,
J. O. Everett,
O. M. Powers.

Sworn to this 26th day of May, A. D. 1885, before me.

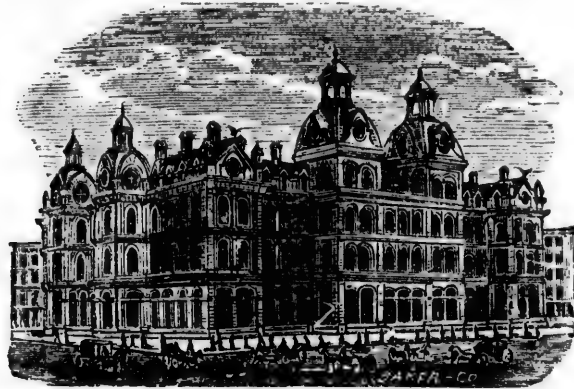
D. B. Giveler,
Justice of the Peace.

Oath to be administered to a witness by the arbitrators :
You do solemnly swear, that the evidence you shall give to the arbitrators here present in a certain controversy submitted to them by and between Henry Smith and Richard Brown, shall be the truth, and nothing but the truth, so help you God.

Nations by a system of arbitration are avoiding bloody and protracted wars.

Arbitration Best for Farmers.

Arbitration is almost invariably preferable to litigation. It is not only the easiest, quickest and cheapest way to settle disagreements, but saves much vexation and subsequent dissension. Were individuals, corporations and nations to arrange their disputes by arbitration, instead of resorting to litigation and warfare, the people would be saved millions of treasure, and the world spared much shedding of blood. A peaceful settlement of difficulties is usually followed by prosperity, while "going to law" or war usually results in loss and suffering to both contestants. Indeed, litigation and warfare are twin relics of the dark ages, and so long as they continue in vogue we may look in vain for harbingers of the promised millennium. Of all classes, farmers should, so far as possible, avoid entering into litigation; for whether they win or lose, they are proverbially worsted, the lawyers usually taking the cream, and leaving only the skim-milk for the winning contestant. Truly, there is neither glory nor honor, profit nor pleasure in litigation, and the less people who profess to live "on the square," and, according to the Commandments, have to do therewith, the better it will be for both their present and future peace and prosperity. Even in the most aggravating case of trespass, and the like, no good citizen should resort to the law, until all amicable attempts at settlement have failed. Indeed, and finally, whatever may be the provocation, don't get mad and impulsively prosecute your neighbor, but keep your temper.



NEW YORK STOCK EXCHANGE.

BOARDS OF TRADE AND STOCK EXCHANGES.

Boards of Trade and Stock Exchanges were originally organized to facilitate trade in the various commercial interests of the country; but unfortunately instead of blessing and benefiting mankind they have become gigantic engines of robbery and oppression. Members are elected by ballot and the admission fees vary in different organizations from nothing to \$3,000.00.

Dealing in Futures.

This is simply a "high-toned" form of gambling, or in other words a system of "marked guessing" in which the best guesser wins. The game, like all other popular gambling games, is exceedingly simple. You simply bet on the market if it goes up or down, you win or lose just as you have staked your money.

Margins.

Margins are sums of money put up as a forfeit to secure the winner. When the margin is exhausted so that further loss is not guaranteed, it is the custom to close the trade and the winner "rakes in the pot" using the gambler's way of putting it.

Option Trading.

"Seller's option" gives the person selling the privilege of making delivery at any time before the expiration of the contract by giving one day's notice. "Buyer's option" gives the

purchaser a claim for delivery at any time before the maturity of the contract.

Corners.

Thousands of bushels of grains are bought and sold for every bushel brought into the elevators. Chicago Board of Trade sells every day as much wheat as the State of Illinois harvests in a year. It can then be easily seen how "commerce" can be forced. In a Board of Trade each buyer buys upon the supposition that each seller is selling what he has not got, and the buyer is buying what he does not want. Now it is easy for a set of men with an unlimited amount of money to combine and "corner" any article in the market. It simply consists of buying more than can be delivered, and then making the sellers deliver or forfeit their margins. A "bull" is one who operates to raise the market—so called from the nature of the bull to toss with his horns. A "bear" is one who tries to lower the market, so called from the nature of the bear to tear down with his claws. A "lame-duck" is a member unable to fulfill his contracts, and is therefore expelled.

Preferred Stock.

This kind of stock takes preference of the ordinary stock of a corporation, and the holders are entitled to a stated per cent. annually out of the net earning before a dividend can be declared on the common stock. Preferred stocks are generally the result of reorganization, although sometimes issued in payment of floating or unsecured debts.

How Stock is Watered.

Sometimes the charter of a corporation forbids the declaring of a dividend exceeding a certain per cent. of the par value of its stock. In this case the directors may find it desirable to "water" the stock—that is, issue additional shares. This increase in the number of shares of course reduces the percentage of dividend, although the same profit in the aggregate is secured to the stockholders.



How to Detect Errors in a Trial Balance.

No rule or set of rules can be given for the *certain* detection of all errors in a Trial Balance, save a careful review of the entire work. If the errors are few the following rules may be of service:

1. If the error be exactly \$1, \$100, \$1000, etc., the mistake is very likely to be found in the additions either in the Ledger accounts or in the Trial Balance.

2. If the error is a large amount, see that all the amounts have been entered in the Trial Balance.

3. If an amount has been omitted in posting, the Trial Balance will be just that amount out of Balance. Look for that amount in Journal or other books.

4. The Cash Balance can never be on the credit side. The balance of Bills Receivable should never be on the credit side, nor the balance of Bills Payable on the debit side of the account.

5. If the amount has been posted on the wrong side of the Ledger the Trial Balance will be just twice that amount out of balance. Look for half that amount through the books.

6. If the error is divisible by 9, it is very likely that the mistake was made by a transposition of figures, as, 345 posted 453 makes an error of 108, which is divisible by 9, again 753 posted 735 makes an error of 18, also divisible by 9. Errors of transposition are the most difficult to find.

7. If the error is in the dollar column or cents column only, the columns on the left need not be re-added.

8. If the above rules fail, only a careful review of the entire work, checking each entry, will determine where the mistake has been made.

HOW TO KEEP ACCOUNTS.

RULES FOR KEEPING ACCOUNTS.

The following are suggested as simple forms for keeping accounts for the use of those whose business or taste does not require a more elaborate form of book-keeping:—

Always charge or "debit" a person for what he may get, and "credit" him for what you receive from him. The word "To," prefixed to an entry, indicates a debit, and the word "By," a credit.

The books necessary are two, called a Day Book and Ledger. In the Day Book should be entered, in diary form, every transaction as it occurs, using as simple and concise wording as possible to express all the facts.

Accounts may be opened with "Cash," "Stock," "Merchandise," "Bills Payable," "Bills Receivable," "Interest," "Profit and Loss," "Expense," etc.; and the farmer may open accounts with each field of his farm, as "Field No. 1," "Field No. 2," "Orchard," "Meadow," etc., charging each field with the amount of labor and material expended upon it, and crediting it with its products. He may also keep an account with his cows, pigs, fowls, etc., and thus at any time tell at a glance the profits or losses of each department of his business.

CASH BOOK.

Cash Rec'd. Cash Paid.

1891					
May	2	Received for 500 bush. Corn.....	200	00	
"	5	Paid Hired Man.....			20 00
"	6	Paid Interest.....			150 40
"	10	Received for 22 Hogs.....	208	90	
"	12	Paid for Groceries.....			11 90
"	15	Received for 20 doz. Eggs.....	2	00	
"	19	Received for One Cow.....	20	00	
"	23	Paid for Coal.....			16 00
"	27	Paid for Lumber.....			102 65
June	1	Received for Butter.....	9	25	
"	2	Received one Load of Hay.....	6	30	
"	10	Balance Cash on Hand.....			145 50
		NOTE:—To find the balance in cash add up the amount received and subtract from that the amount paid out and the result will always equal the cash on hand.	446	45	446 45

FORMS OF ACCOUNTS.

157

FORM OF ENTRIES IN DAY BOOK.

Springville, January 5, 1891.

Dr. Cr.

Chas. Wadsworth,	Dr.		
To 1 Ton Hay.....		\$14 00	
Cash,	Cr.		
By Paid Interest on Mortgage.....			\$72 00
Expense,	Dr.		
To Repairing Wagon.....		1 75	
Jan. 6.			
John Smith,	Dr.		
To 1 Cord Wood		4 25	

CONVENIENT FORM OF ENTRIES IN LEDGER FOR FARMERS.

Charles Wadsworth.

1891				
Jan. 5	To 1 Ton Hay.....	\$14 00		
" 30	" 2 Bbls. Potatoes, at \$1.75..	3 50		
March 4	By Cash on account.....		\$10 00	
" 20	To 1 Cord Wood.....	4 25		
April 7	By 1 Plow		17 50	
May 3	To 10 Bush. Oats, at 40 cents.	4 00		
June 10	" 3 Bbls. Potatoes, at \$2.	6 00		
July 1	By balance charged below.		4 25	
		\$31 75	\$31 75	
July 1	To balance.....	\$1 25		

FORM OF BILLS.

NEW ORLEANS, July 26, 1891.

MR. J. SMITH,

To B. H. FENTON & Co., Dr.

	To 48 yds. Muslin,	@ .22	10	56
	" 12 " Drilling,	" .18	2	16
	" 10 " Gingham,	" .35	3	50
	" 20 " French Chintz,	" .40	8	00
	" 7 " Broadcloth,	" 3.25	22	75
	" 2 doz. Spools Thread,	" .75	1	50
	" 1 " Linen Napkins,	" 2.00	2	00
	" 3 1/2 yds French Cassimere,	" 1.90	6	65
	Rec'd payment,		\$57	12
	B. H. FENTON & Co.			

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0	40
1	90
6	00
2	65
5	50
6	45

HOW TO KEEP FARMER'S ACCOUNT.

Cornfield.

			Dr.	Cr.
1892				
April	4	To 7 days' Plowing @ 2.50.....	17	50
"	8	" 2 days' Furrowing @ 2.40.....	4	80
"	"	" 2 bush. Seed @ 2.50.....	5	
"	"	" 8 days' Planting @ 1.50.....	12	
May	1	" 3 days' Hoeing @ 1.25.....	3	75
"	8	" 8 days' Cultivating @ 2.00.....	16	
"	"	" 12 days' Hoeing @ 1.25.....	15	
Aug.	14	" 9 days' Cutting Corn @ 1.25.....	11	25
	28	By 12 bush. Corn @ 75 c.....		9
Oct.	22	" 74 bush. Corn @ 42c; Cornstalks \$50		81
"	24	To 40 days' Husking @ 1.25 ..	50	
"	"	" 5 days' work with team @ 2.50	12	50
"	"	By 20 bush. Corn @ 40 c.....		8
Nov.	3	" 12 bush. Corn @ 40 c.....		4
"	17	" Cash for 300 bush. Corn @ 75 c.....		225
"	25	" Cash for 80 bush. @ 75c.....		60
"	31	To Marketing 380 bush. Corn @ 4c.....	15	20
"	"	" Interest	35	
		Total Gain.....	189	80

Family Expense Account.

			Dr.	Cr.
1879				
Jan.	5	To 2 prs. Boots @ 6.00.....	12	
"	15	" 1 pr. Ladies' Boots.....	2	50
"	19	" M. Cohn, Cutting Pants and Vest....	3	
"	16	" 1 lb Tea.....	1	
Feb.	15	" 5 yds. Cassimere @ 2.00; Sundries 4.75	10	75
May	29	" 1 pr. Boots @ 2.50; Rep'g Shoes 50c	3	
June	20	" 1 pr. Pan	8	
Sept.	24	" 1 pr. Shoes 1.75; 1 pr. Boots 4.00.....	5	75
"	24	" 1 Umbrella 2.00; Sundries 2.75.....	4	75
Nov.	8	" 1 pr. Boots.....	8	
Dec.	18	" M. Cohn, Cutting Pants.....	1	50
"	18	" 1 pr. Boots.....	5	
		Total Expense.....	65	25
			65	25



**LEGAL POINTS ON BOOK-KEEPING.****PRACTICAL SUGGESTIONS FOR BUSINESS MEN.**

1. The day book, or other books of original entries, are evidences of sale and delivery of goods, and work done.
2. The time to make an entry against the purchaser is when the goods are ready for delivery.
3. Entries, to be admissible as evidences, should be made by the proper person, and made without erasure, alterations or interlineation.
4. Mistakes should be corrected by marking the wrong entry void, and then making a correct entry, or if there is sufficient room, make a brief explanation.
5. All accounts must be itemized, and no general charge can be considered as evidence without giving the items.
6. If A. guarantees that he will see that B. will pay a certain bill of goods, then the goods must be charged to A. and not to B., but if A. guarantees the account of B., if the account is for some date of the past, then such a guarantee must be in writing.
7. To collect a debt on the evidence of book account, from a person in a distant place, a copy of the account should be made out, and accompanied with an affidavit, setting forth that the above account is correctly taken from the book of original entries, and that the charges were made at or about the time of their respective dates, that the goods were sold and delivered at or about the time the charges were made, and the charges are correct, and accounts just, and that the person named is not entitled to any credits not mentioned in the account. This affidavit should be sworn to before a magistrate, commissioner or notary public, and it will save the trouble of producing or sending books.

THE CLEARING-HOUSE SYSTEM.

A clearing-house is an association of the banks and bankers of a city for the exchange of their checks and the adjustment of accounts between themselves. A business man, receiving a check in the course of trade, seldom thinks of sending it to the bank on which it is drawn, but simply deposits it in the bank with which he keeps his account, only taking the precaution to have it "certified," if he doubts its goodness. Thus, at the close of a day, each bank will hold a number of checks drawn on other banks. These are assorted, and placed in envelopes marked with the names of banks on which they are drawn and with the total amount, and taken by a clerk and messenger to the clearing-house. There the balances against or in favor of each bank are ascertained, and are paid in by a certain hour each day, and the accounts settled. By the clearing-house system the exchange of millions of dollars is daily effected in large cities by the transfer of a few thousands.



HOW TO DETECT COUNTERFEIT MONEY.

1. A COUNTERFEIT is a fac-simile of the genuine, or made as nearly like it as possible. A spurious note is different in design from the genuine and calculated to pass where the genuine is not much known. An altered note is one altered from a lower to a higher denomination. Piecing is done by making ten notes or bills of nine, by cutting a counterfeit note into ten pieces.

2. There are two silk threads through the bill lengthwise, one near the top and one near the bottom. By holding it up to the light you can easily see the threads in each bill. This is one of the best tests of a genuine bill, because no counter-

feiter can put in the silk threads and imitate the genuine bill in that respect.

3. See that the portraits are good, and notice that the pupil and the white of the eye show distinctly. Then see that the sky and water are clearly transparent. In counterfeit notes the pictures are always poor and the sky, water, etc., looks scratchy and irregular.

4. The ink used in genuine notes is very difficult to imitate. It gives a clear, glossy expression, while counterfeiter's ink looks dull, smutty and muddy.

5. The paper of a counterfeit is always of an inferior quality, while the government has the best and most perfect system of manufacturing the highest grade of paper.

6. Examine the medallion rulings and circular ornaments around the figures with a microscope, and see if they are regular and in all parts mathematically exact. This is done by a machine that costs from \$75,000 to \$150,000, and consequently is beyond the reach of counterfeiters. Engravings by hand can never imitate this work. These medallion lines, or rulings, can be traced by means of a line through the figures, never breaking or losing itself in another line. In counterfeits it is always broken and irregular.

8. Notes are altered by raising the denomination by taking out the genuine with acid and printing in a higher denomination with a counterfeit die. They can be easily detected by the stain which the acid produces with which the figures are taken out.

8. NEVER BE IN A HURRY IN TAKING MONEY. Look at it carefully, and never hand a bill of large denomination to a showman, especially at the tent of these traveling circuses or at the door of cheap theaters. If they have counterfeit money they will not hesitate to mix it up in the change they return to you.

HOW MERCHANTS MARK GOODS.

It is customary in many mercantile houses to use a private mark, which is placed on the goods to denote their cost and selling price. A word or phrase containing ten different letters is taken, the letters of which are written instead of figures. For instance, the word "Rockingham" is selected; then the letters represent the figures as follows:—

r	o	c	k	i	n	g	h	a	m
1	2	3	4	5	6	7	8	9	0

If it is required to mark 1.50, it is done thus, *rim*; 75 would be *gi*; 37, *cg*, &c.

Blacksmith, Importance, Republican, Perth Amboy, Fair Spoken, Now be sharp, Noisy Table, and Cash Profit, are among the words and phrases which can be used in this manner.

An extra letter, called a "Repeater," is used to prevent the repetition of a figure. Instead of writing *edd* for 100, which would show at once that the two right-hand figures were alike, and thus aid in giving a clue to the key-word, some additional letter would be selected for a repeater, —*y*, for instance,—and then the price would be written *edy*; 225 would be written *wye*.

Instead of letters, arbitrary characters are frequently used, something like the following:—

└	z	T	>	△	×	┐	≡	Λ	□
1	2	3	4	5	6	7	8	9	0

Fractions may be designated by additional letters or characters. Thus, *f* may represent $\frac{1}{2}$, *v* $\frac{2}{5}$, &c.; or $\frac{1}{2}$ may be written *o*, $\frac{1}{4}$ *+*, &c.



THE COST AND SELLING PRICE.



Rapid Methods for Marking Goods.

Those who buy largely can best appreciate the value of a quick and rapid method for calculating the per cent. of profits desired.

If you wish to calculate the per cent. on a single article, the following table will be an excellent method. If you desire to sell an article at any of the following per cents, say the article costs 70 cents, and you wish to make

- 10 per cent. divide by 10, multiply by 11=77.
- 20 per cent. divide by 10, multiply by 12=84.
- 25 per cent. multiply by 10, divide by 8=87½.
- 30 per cent. divide by 10, multiply by 13=91.
- 33⅓ per cent. add ⅓ of itself=93⅓.
- 33⅓ per cent. divide by 3, multiply by 4=93⅓.
- 50 per cent. add ½ of itself=\$1.05.

Merchant's Retail Rule.

As many articles, such as tea, sugar, coffee, etc., are sold at a given number of pounds per dollar, the following method will show the number of pounds that can be purchased for any number of cents.

RULE.—*Multiply the number of pounds to be sold for one dollar by the number of cents worth desired.*

EXAMPLE.—When sugar is sold at fourteen pounds for a dollar, how many pounds can be purchased for seventy cents?

Solution, $14 \times .70 = 9.80$ or $9 \frac{4}{5}$



When you deal with an agent you do business at your own risk.

HOW TO DO BUSINESS WITH AN AGENT.

1. A *general agent* is one authorized to transact all his principal's business, or all his business of some particular kind, or at some particular place.
2. A *special agent* is one authorized to do one or more

special things in pursuance of particular instructions, or within restrictions necessarily implied from the act to be done.

3. If a special agent exceeds his authority, the principal is not bound; but if a general agent exceeds his authority, the principal is bound, provided the agent acted within the ordinary and usual scope of the business he was authorized to transact, and the party dealing with him did not know he was exceeding his authority.

4. Express authority is given to an agent by what is called a Power of Attorney. If the authority is to execute a writing under seal and acknowledged, the power of attorney must be likewise under seal and acknowledged.

5. The agent's authority may be revoked by the principal at any time.

6. An agent concealing his principal is himself responsible.

7. An agent acting fraudulently or deceitfully is himself responsible to third parties.

8. An agent cannot appoint a substitute, or delegate his authority to another, without the consent of his principal.

9. A man may do through his agent whatever he may lawfully do himself.

Factors, Brokers, Attorneys, etc., are but agents in a business sense.

11. The authority of an agent may be constituted in three ways: By deed under seal, by writing, or by mere words.

12. Persons not of age, married women, and aliens may act as agent for others.

13. A notice to an agent is generally considered notice to the principal.

14. The principal is liable to the third person for the negligence or unskillfulness of the agent, when he is acting in the fulfillment of the agency business.

15. Money paid by an agent can be recovered by the principal, if it has been paid by mistake.

16. An agent to sell land, or to do any important business, he should be appointed by a "*Power of Attorney*," which should be registered with the deed.

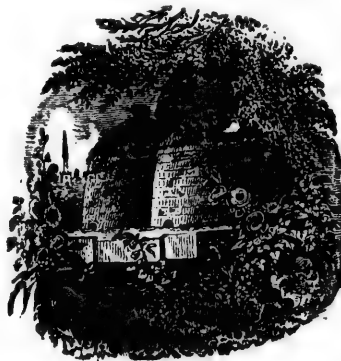


HOW TO MAKE CHANGE QUICKLY.

1. Consider the amount of the purchase as money already counted out ; for example, if the purchase amounts to 46 cents, and you are handed a \$2.00 bill in payment, count out 4 cents to make it 50 cents, then count out the other \$1.50.

2. Should the purchase amount to \$2.54, and you are handed \$10.00, count out 46 cents to make it \$3.00, then count out even dollars to make the \$10.00, and your change is correct.

3. Always count your change after receiving, and see that it is correct.



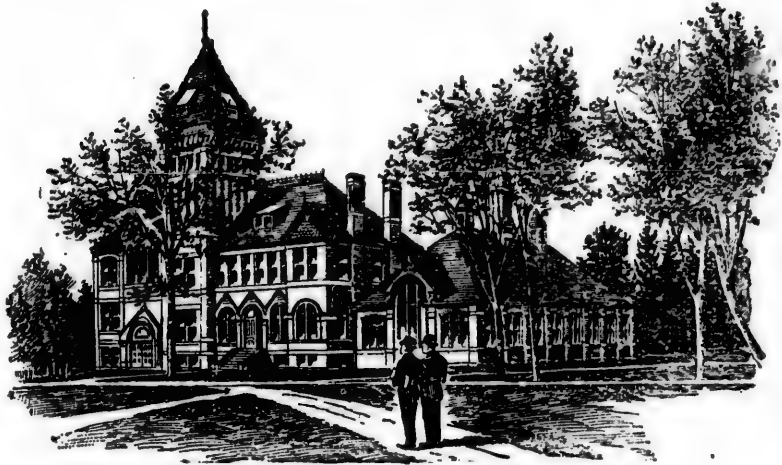
HOW TO OBTAIN WEALTH.

The way to make money is to save it. Always remember and practice the maxim, "A dollar saved, a dollar earned."

A small sum of money saved daily for fifty years will grow at the following rate :

DAILY SAVINGS.

One Cent.....	\$ 950	Fifty Cents.....	\$47,520
Ten Cents.....	9,504	Sixty Cents.....	57,024
Twenty Cents.....	19,006	Seventy Cents.....	66,528
Thirty Cents.....	28,515	Eighty Cents.....	76,032
Forty Cents.....	38,015	Ninety Cents.....	85,537
One Dollar.....	.....		\$475,208.



**How to Write a Subscription to Build a Church or Bridge
or other Public Works.**

WE THE UNDERSIGNED, do severally promise and agree to pay F. J. Davis, George Haight, and B. F. Lincoln, Trustees of the Congregational Society of Ottawa, Illinois, (or the Commissioners of Highways of the Township of Ottawa,) the sum set opposite our respective names for the purpose of building a church for said society in the city of Ottawa aforesaid, (or for the purpose of building a bridge across the Illinois river,) and we request the said Trustees, (or Commissioners,) for the contract for the building of said church, (or bridge,) and to build the same and to apply the sums of money hereunto subscribed in payment thereof.

Witness our hands this first day of July, 1891.

William Hull,	- - - - -	\$200.00
Jacob Moss,	- - - - -	100.00
Thomas J. Davis,	- - - - -	50.00



"In the midst of life there is death."

HOW TO WRITE RESOLUTIONS

On the Death of Members of Societies or Prominent Citizens.

1. Resolutions of societies, clubs, or any organization on the death of a member should always be deliberate, concise and consistent.
2. Great care should be taken that they are not too brief nor too long, and be careful to avoid excessive exaggerations.
3. Resolutions in form are always prefaced with a preamble which should specify the occasion of what shall follow. The preamble should begin with "whereas," and each resolution should begin with "resolved" or "be it resolved."
4. When resolutions have been framed by a committee, all their signatures should be annexed to the resolutions.

FORM OF RESOLUTIONS.

WHEREAS, The great and supreme Ruler of the universe has in his infinite wisdom removed from among us, one of our worthy and esteemed fellow-laborers Henry A. Harlow; and whereas, the long and intimate relation held with him in the faithful discharge of his duties in this society makes it eminently befitting that we record our appreciation of him; therefore,

Resolved, That the wisdom and ability which he has exercised in the aid of our organization by service, contributions, and counsel, will be held in grateful remembrance;

Resolved, That the sudden removal of such a life from among our midst leaves a vacancy and a shadow that will be deeply realized by all the members and friends of this organization, and will prove a serious loss to the community and the public.

Resolved, That with deep sympathy with the bereaved relatives of the deceased we express our hope that even so great a loss to us all may be overruled for good by Him who doeth all things well;

Resolved, That a copy of these resolutions be spread upon the records of this organization, a copy printed in the local paper-and a copy forwarded to the bereaved family.

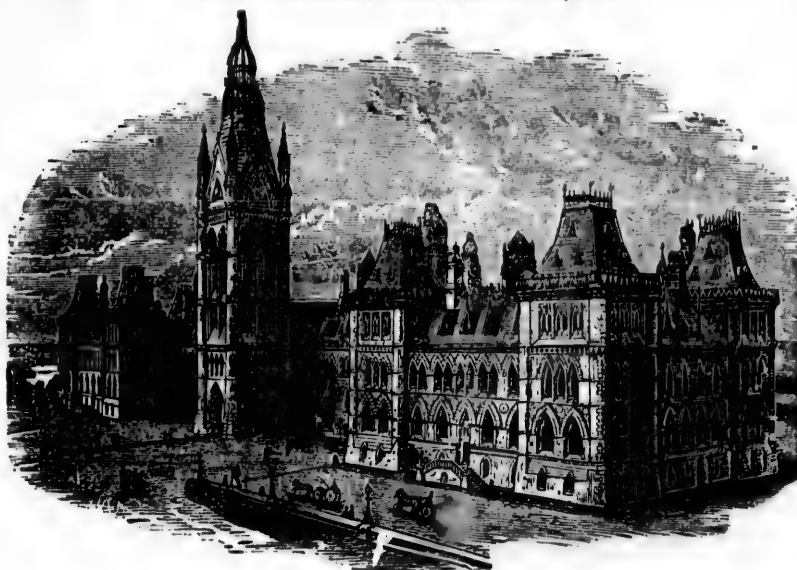
Old Superstitions.

Born on Monday, fair in the face.
 Born on Tuesday, full of God's grace.
 Born on Wednesday, best to be had.
 Born on Thursday, merry and glad.
 Born on Friday, worthily given.
 Born on Saturday, work hard for a living.
 Born on Sunday, shall never know want.



The Sundays Observed by the Different Nations.

Monday.	.	.	.	.	.	.	GREEKS.
Tuesday,	.	.	.	.	.	.	PERSIANS.
Wednesday,	.	.	.	.	.	.	ASSYRIANS.
Thursday,	.	.	.	.	.	.	EGYPTIANS.
Friday,	.	.	.	.	.	.	TURKS.
Saturday,	.	.	.	.	.	.	ISRAELITES.
Sunday,	.	.	.	.	.	.	CHRISTIANS.



PARLIAMENT BUILDING, OTTAWA, CANADA.

FIXED AND MOVABLE FESTIVALS, &c.

New Year's Day.....	January	1
Epiphany.....	"	6
Septuagesima Sunday.....	February	14
Quinquagesima—Shrove Sunday.....	"	28
St. David.....	March	1
Ash Wednesday.....	"	2
Quadragesima—1st Sunday in Lent.....	"	6
St. Patrick.....	"	17
Annunciation—Lady Day.....	"	25
Palm Sunday.....	April	10
Good Friday.....	"	15
Easter Sunday.....	"	17
Easter Monday.....	"	18
St. George.....	"	23
Low Sunday.....	"	24
Rogation Sunday.....	May	22
Queen Victoria's Birthday.....	"	24
Ascension Day—Holy Thursday.....	"	26
Pentecost—Whit Sunday.....	June	5
Trinity Sunday.....	"	12
Corpus Christi.....	"	16
Accession of Queen Victoria.....	"	20
Proclamation of Queen Victoria.....	"	21
St. John Baptist—Midsummer Day.....	"	24
St. Peter and St. Paul.....	"	29
Dominion Day.....	July	1
Michaelmas Day.....	September	29
All Saints.....	November	1
Birth of Prince of Wales.....	"	9
1st Sunday in Advent.....	"	27
St. Andrew.....	"	30
Conception.....	December	8
St. Thomas.....	"	21
Christmas Day.....	"	25

**LEGAL HOLIDAYS IN ONTARIO, NOVA SCOTIA
AND NEW BRUNSWICK.**

New Year's Day; Good Friday; Easter Monday; Queen's Birthday;
Dominion Day; Christmas Day.

ADDITIONAL HOLIDAYS IN QUEBEC.

Epiphany; Annunciation; Ascension; Corpus Christi; St. Peter's and
St. Paul's Day; All Saints; Conception.

Also, throughout the Dominion, all days appointed by Proclamation for
a General Fast or Thanksgiving.

POSTAL RATES.—LETTERS.

Letters addressed to places in Canada and United States,
3 cents for each oz. or fraction thereof.

Newfoundland and Great Britain (whether sent by Canadian or New York
Mail Steamers),
5 cents for each half oz. or fraction thereof.

POST CARDS, for correspondence between Canada and the United King-
dom, may be obtained at the Stamp Agencies at 2 cents each, as also cards
for any Postal Union country.

N. B.—One cent postal cards, with an extra cent stamp attached, can be
used in place of two cent postal cards; nothing can be pasted on or attached
to a postal card.

CITY OR DROP LETTERS, FOR CITY DELIVERY.

2 cents for each oz. or fraction thereof.

The above rates must in every case be prepaid by postage stamp. If
insufficiently paid double the amount of the deficient postage will be
charged on delivery.

REGISTRATION OF LETTERS.

Letters intended to be Registered, when addressed to places in CANADA,
must be prepaid by stamp, in addition to the postage rate, 5 cents each.
To the UNITED STATES, 5 cents each, and to the UNITED KINGDOM, 5 cents
each. The Registration fee on all letters must be prepaid by Registration
Stamps, which are not available for payment of ordinary postage. All
letters for Registration should be posted 15 minutes before the hour of
closing the mails.

REGISTERED LETTER STAMPS may be obtained at any stamp agency.

All classes of matter addressed to Postal Union countries may be regis-
tered, and the sender may entitle himself to an acknowledgement of
delivery to the party addressed, by the payment of a fee of 5 cents in addi-
tion to the registration fee.

No letter will be accepted for Registration, addressed either to a fictitious
name or to initials, and any such Registered Letters received from other
offices or deposited in the Letter Box for Registration will be sent to the
Dead Letter Office.

NEWSPAPERS AND PERIODICALS

published regularly at intervals of not more than one calendar month, hav-
ing a full title, the place, date of publication, and the number of the issue
printed at the top of the first page, posted by the publishers in the Post
Office at the place where they are printed, and addressed to regular sub-
scribers, or newdealers, resident in Newfoundland, the United States or
Canada, except at the place of publication, are transmitted free of postage.

BOOK PACKETS not exceeding 5 lbs. in weight can be sent to the United Kingdom.

The limit of weight for Book Packets passing in Canada is 5 lbs. The rate is 1 cent for 4 oz., also to Manitoba, North-West Territory and to Victoria, B. C.

Books, and all printed matter to U. S., 1c. per 2 oz.

LEGAL AND COMMERCIAL PAPERS.—Legal and Commercial papers, posted for places in Canada, generally are subject to *letter* rate unless sent by parcel post; except deeds and insurance policies, which are one cent per 2 oz. Postage rates on Legal and Commercial papers, addressed to Postal Union countries, are as follows, viz.: to countries where the letter rate is 5 cents per $\frac{1}{2}$ oz. the rate of legal and commercial papers is 5 cents for the first 10 oz., and one cent for each additional 2 oz. or fraction; or to countries where the letter rate is 10 cents per $\frac{1}{2}$ oz., the rate is 5 cents for the first 4 oz., and 2 cents for each additional 2 oz. or fraction.

PARCEL POST.

There is no parcel post between Canada and the United States.

5th class matter to U. S., 1c. per oz. Limit of weight, 5 lbs.

A parcel post, by the Canadian steamers only, between Canada and the United Kingdom, Newfoundland and all those countries and colonies with which the United Kingdom maintains a parcel post, has been established. A parcel must not exceed 5 lbs. weight, nor be more than 2 ft. long by 1 ft. wide or deep. A Customs declaration form must be obtained and filled up at the Post-office, noting contents and value. Parcels posted without this formality are sent to the Dead Letter Office. The rate from Toronto to the United Kingdom is 25 cents per lb. or fraction of a lb. Tobacco is prohibited in the case of parcels for the United Kingdom. By inland Canadian parcel post the weight of parcels is limited to 5 lbs., and the size to 2 ft. by 1 ft. The rate is 6 cents per 4 oz., or fraction of 4 oz.

PATTERN AND SAMPLE POST.

CANADA.—Patterns and samples of merchandise, not exceeding 24 oz. in weight, when posted in Canada for places within Canada, must be prepaid by postage stamp at the rate of *one cent* per 4 oz. weight, and put up in such manner as to admit of inspection. Goods sent in execution of an order, however small the quantity may be, or articles sent by one private individual to another, not being actually trade patterns or samples, are not admissible as such.

UNITED STATES.—Patterns and samples of merchandise, posted for places in the United States, will continue to be subject to the special rate of 2 cents for first 4 oz., 1 cent each additional 2 oz. prepaid by postage stamp. Not to exceed 8 oz. in weight.

All newspapers, books, printed matter, samples, patterns to be sent by any mail, must be posted half an hour before the time of closing.

Letters to mere initials or fictitious names will not be delivered, unless addressed in care of a resident, or to some box in the Post-office.

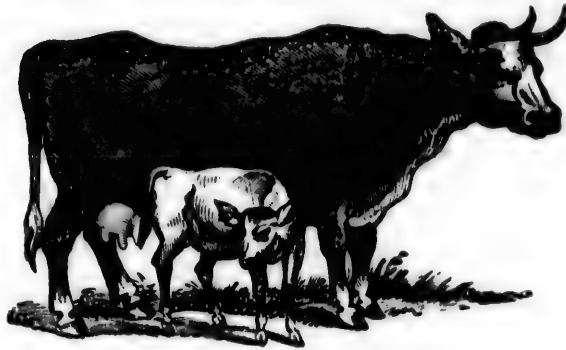
Re-directed letters to places within the Dominion or U. S. will be forwarded without any additional charge, but should not be taken from post-office.

Letters *originating* in Canada, re-directed to any of the Postal Union countries, except the United States or *non* Postal Union countries, where prepayment is *not* compulsory, will be forwarded even if taken out of the office and subsequently re-posted.

Letters containing Gold or Silver Money, Jewels or precious articles or anything liable to Custom's duties, cannot be forwarded by Post to any of the Postal Union countries except the United States.

POST-OFFICE SAVINGS BANK.

Deposits from \$1.00 upwards, on which interest is allowed, will be received for transmission to the Central Office of the Post-office Savings Bank. Pass Books, and every information to be had on application.



ESTRAY NOTICE.

Take Notice! — On the 3rd day of June, 1891, there strayed on to my inclosed land in the town of Van Wert, County of Du Page: One two-year old colt, a dark bay, with small star in the forehead, and left hind foot white; and one dark brown calf, with black spots on each side. Anyone claiming the above described animals can obtain possession of same by furnishing sufficient proof of ownership, and paying all expense and cost.

J. A. Hertel.

1. The above notice may be printed in the local paper, or written out, and tacked up in three or four prominent places in the vicinity where the stray animal was taken up.

2. No one can claim a stray without advertising the same, and giving the proper notice, such as the statutes of the State require.

3. If the stray is not redeemed by the owner, it may be sold at public auction to pay cost and expense.



SWINDLING SCHEMES.

SIX PRACTICAL RULES TO REMEMBER.

1. **BEWARE OF THE SWINDLER,** He is everywhere and in all kinds of business.
2. *Never sign a paper of any kind for a stranger. Make every man unknown to you, who desires to do business with you, prove to you, beyond a doubt, that his business is legitimate and that he acts within the limits of his authority.*
3. *Never try to beat a man at his own game.* The sharpers at every fair and circus and other places where people in large numbers congregate, will always offer you great inducements with cards, dice, wheels of fortune, etc. They will urge you to bet on a certain card or number and show you how one dollar could have won \$20.00 or a \$100.00; but when you bet your money, you never win.
4. *Never bet or gamble.* In trying to get something for nothing, we too often find ourselves the victims of confidence and swindling schemes. Honesty is the best policy, always has been and always will be.
5. *Never try to get the best of a sharper by buying a box, watch-case, or anything else in which you have seen him put a \$10 or a \$20 bill.*
6. *Deal with responsible parties, or see that the article is worth the price before paying for it, and you will never suffer the mortification of being swindled.*

A SWINDLING NOTE.

Naperville, Ill., Oct. 20, 1891.

One year after date, I promise to pay Fred. J. Davis, or bearer Ten Dollars, when I sell by order Four Hundred and Seventy-five Dollars (\$475.00) worth of Patent Fanning Mills, for value received, at ten per cent. per annum. . . . Said ten dollars when due is payable at Naperville, Illinois.

Witness: M. J. Meyer.

C. E. Selby,

Agent for Fred. J. Davis.

1. Although the above scheme of the confidence man has been exposed time and time again, yet it still continues to add yearly to its list of victims. A paper is drawn up wherein a farmer agrees to pay ten or twenty dollars when he has sold goods to a given amount. By tearing off the right-hand end of this paper, what is apparently an agreement for a small amount, becomes a promissory note for a considerable sum. This note is sold at a bank, thereby becoming the property of a third and innocent party, and the signer of the agreement is called upon to pay the note.

2. Never sign a paper without carefully reading and examining the same. It is dangerous to sign a paper for an unidentified stranger.



DON'T TRY TO GET SOMETHING FOR NOTHING.

THE CHEAP JEWELRY SWINDLE.

Experience has proven again and again, that there is nothing gained BY TRYING TO BEAT A MAN AT HIS OWN GAME and succeed in getting something for nothing.

THE SWINDLE.

The auctioneer starts out, after getting a crowd about him, by giving back to the purchasers more money than they paid for the article, but this does not generally last long. Higher priced articles are soon put up, such as watches, etc., and the price raised from 50 cts., or a \$1.00 to \$10.00 or \$20.00. The purchaser sees the seller stick a \$20.00 bill or a \$50.00 bill into the watch and close it up, and so sure are the spectators that they saw the money go into the watch that there is no lack of purchasers. But when the watch is purchased and opened it contains a \$1.00 bill instead of a \$20.00, and the purchaser is a wiser, but not a richer man.



A SWINDLER SECURING THE SIGNATURE OF HIS VICTIM.

THE BARB-WIRE SWINDLE.

The "Wire Fence Man" is a new swindler working the farmers. The scheme is a shrewd one and is executed as follows: A nicely dressed man, very pleasant in his manners, meets the farmer in his field or at his home, and desires the privilege of exhibiting his wire fence stretcher machine, for which privilege he will build the farmer thirty or forty rods of good fence for exhibition. All the agent asks is board while he is at work on the fence, with the understanding that the farmer is to go after the machine at the nearest depot and pay the charges not to exceed \$3.00 for the fence, all set up where he wants it. In order to have everything understood, and as a warrant of the farmer's good intentions, he requires him to sign a written order on a postal card, which he mails (as he says) to his partner, which proves to be a written contract for the machine, price \$200 (worth less than \$25.00). After the machine comes, a new man turns up with the postal

order for the machine, and requires the payment of the \$200 as per agreement on the card. He claims to be an attorney for the company and threatens to sue in the highest courts until he secures the payment of the order.

When will people begin to study the "Safe Methods of Business" and learn that it is not safe to SIGN A PAPER FOR A STRANGER?

THE PATENT FENCE SWINDLE.

It is an old but true maxim, that "experience is an expensive teacher," but many will learn in no other way. The wire and picket fence combination is a good article for fencing gardens, etc., too expensive, however, for general use.

THE SWINDLE.

An agent, very nicely dressed, meets you in your garden or field, and shows you extensive engravings of the patent combination fence. He warrants the fence to be just as represented, 44 pickets to the rod, well painted, firmly fastened by six galvanized steel wires, etc. All of this he agrees to furnish at the low price of 20 cts. per rod.

After convincing you of the cheapness of the fence, which is easily done, he offers you a special discount to take the agency for your township, for which you are to advance your credit to the amount of \$128. After securing your note he sends you a sample of the fence. But you soon find that the fence cannot be made for any such price per rod, and you are out of the amount of credit advanced. The note has been sold, and after passing into the hands of an innocent party it can be collected.

1. CAUTION. The fence is a Patent Right Fraud. Any man who asks you to sign a note to secure an agency is a swindler, or is acting the part of a rascal for some one else.

2. If the fence was not a fraud, our hardware merchants would long ago have investigated it, and if a good thing, would have it in stock. It must be a poor concern that necessitates such an unbusiness-like introduction.

3. Whoever deals with an agent deals with him at his own risk, for an agency can be revoked at any time.

4. Most of those swindling contracts are for no specified time and consequently the agency can be terminated at the pleasure of the swindler.

5. Never sign a paper for an agent without satisfactory knowledge of his character, or of his business.

THE LIGHTNING-ROD SWINDLE.

CONTRACT.

Naperville, July 3, 1891.

Mr. F. J. Bechtold, please erect at your earliest convenience your lightning rods on my *House* according to your rules, of which said *House* I am the owner, for which I agree to pay you cents per foot and \$3.00 for each point, \$4.00 each for vanes, \$5.00 each for arrows, \$1.50 each for balls, and \$2.00 for braces, cash, when completed, or a note due on the first day of *January* next, 1892.

F. Hauswirth.

A GOOD LIGHTNING ROD PROPERLY APPLIED IS THE CHEAPEST AND BEST INSURANCE KNOWN.

1. In the blank for cents....., the canvasser or agent puts in some single figure, say 7, that being understood to be the regular price per foot, but after the contract is signed, the agent at his leisure quietly inserts a 6 before the 7, or some other figure, making the amount 67 cents per foot instead of 7 cents, as signed and agreed upon.

2. A swindling note is generally obtained, and the contract is kept in the background ; but when the collector comes along and presents the note backed by the contract in plain figures, the farmer sees that he *himself has been struck by lightning* while trying to protect his house.

3. The note is generally in the hands of an innocent party, and according to law may be collected.

4. The agent canvassing the victim generally promises that the rodding of the house shall not cost over \$28 00 or \$35.00. But that man, however, never appears on the scene again.

5. Never deal with irresponsible persons. If you desire rods, employ your hardware merchants ; or if you desire anything in the machinery line, patronize honest and trusted dealers, and take no chances of "being taken in."

THE FARM-MACHINERY SWINDLE.

The latest scheme for fleecing unwary farmers is as follows: A plausible, well-dressed fellow drives up to the farmer's house with two or three different kinds of farm-machinery, and asks permission to store his machines in the farmer's barn, and the accommodating farmer usually gives permission.

After the machines are stored away, the sharper remarks that they are the last of a large lot that he has been selling through the country, and that he is anxious to close out the consignment, and if the farmer will sell two or more of the machines while they are stored in the barn, he shall have 50 per cent. commission on the sale. The offer is a tempting one, and the farmer usually accepts. He is then requested, merely as a business form, to affix his signature to a document, specifying the terms on which the machines are stored on the premises. The farmer signs a lengthy printed document without reading it, or perhaps, if read, without understanding it. At the expiration of 30 days he is astounded by finding himself called upon by another stranger to pay an exorbitant price for the machines stored in his barn. When the farmer objects, he is shown his signature attached to an agreement, which agreement, his lawyer tells him, is drawn in good legal form.

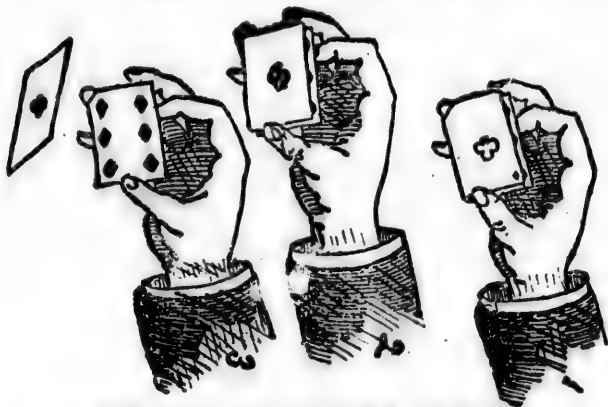
The victims of this game usually lose from \$200.00 to \$500.00.





ALWAYS READ BEFORE SIGNING.

Among the pithy sayings of a well-known German philosopher and reader occurs the following: "Sign no paper without reading it." In these days of education, enlightenment and progress, such a caution would hardly seem necessary to any person in the full possession of his faculties; yet it is astonishing how many people there are, including good business men, who attach their signatures to papers or documents whose contents may have a serious bearing upon themselves or their affairs, with scarcely a glance at their contents. Carelessness in failing to acquaint themselves with the contents of a paper before signing it has worked incalculable harm to thousands of well intentioned people. It is a good thing, therefore, to bear in mind continuously the above quotation, particularly with respect to such papers as express or imply anything in the nature of a contract or a legal obligation.



THE CARD SWINDLER'S TRICKS.

How People Lose their Hard-Earned Money.

1. **THE THREE-CARD MONTE TRICK.** The three-card monte game is, of course, the old one and the best one known to get the greenhorn's money.

2. There are gamblers who make from twenty-five to fifty thousand dollars a year in playing this game, and this amount all comes from the innocent and unsuspecting people who think they have got a snap and try to make something because they think they have the advantage, but on the contrary are always taken in themselves.

3. The successful three-card monte player generally appears in the disguise of a farmer or cattle man, he speaks in the farmer's tone and acts in the farmer's manner and is dressed in the farmer's style. He appears ignorant and manifests more or less intoxication. Generally has his pockets full of rolls of money.

4. **THE GAME.** The cards are three in number and are made especially stiff so that they will hold a corner when turned.

5. **THE CAPPER.** Every monte player has a capper. A capper is a green ignorant looking man who always plays the game and wins a great deal of money. This is done to induce others to play the game. The capper and gamblers are generally in partnership.

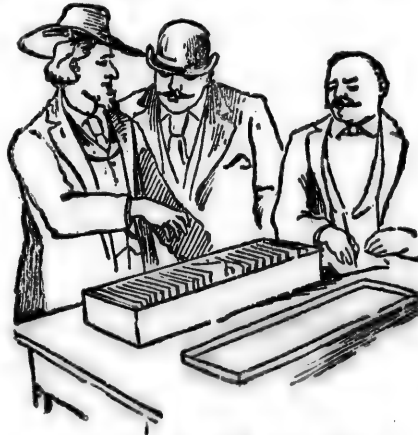
6. The first turn the capper wins. Then he turns the corner of a card when the player is not looking, and his friend think-

ing he has a sure thing bets on the card. In manipulating them the player flattens that card, with some sleight of hand movement and turns the corner of another. The betting man of course picks up the wrong card and loses his money.

7. The capper sometimes marks the card by putting a wet spot on it, and the man who bets on that card finds that the spot from the right card has been wiped off and the spot put on another card by the same sort of a sleight-of-hand performance.

8. There are some three card monte players that are such experts at the game that the capper will tear off the corner of a card, and the innocent farmer betting on the card thus marked finds it has been turned under the corner of another card and the corner of the right card is covered up with the corner of another card.

9 BEWARE. The man who is fooling with cards and offering to bet is not fooling away his money. You will never win anything in that way. Do not try to get something for nothing and think you have a snap; for if you play the game with some one else you will soon become a wiser but a poorer man.



THE ENVELOPE SWINDLE.

1. The envelopes filling an ordinary box each have slips inclosed marked with numbers corresponding with numbers in a show case. There are generally numerous cappers around a game of this kind who play and win large prizes.

2. Many of the envelopes contain a double ticket and the man who plays the game generally opens the envelopes himself when there is nothing at stake and shows you the winning number, but when you draw it he will show you the other slip that contains the other number and you are the loser.

3. Many of the e players give a lot of brass or silver washed prizes that are worth about two or three cents apiece.

4. If you desire to make money, remember that the man who plays games does not go around the country giving away money, but they are generally the sharpest and shrewdest of gamblers, and if you desire to be safe have nothing to do with them, and remember, "*that an honest man never gambles.*"



Always deal with responsible parties.



A COMPASS FOR SURVEYING LAND.

HOW LAND IS SURVEYED.

1. **HISTORY.** Thomas Jefferson and Albert Gallatin are supposed to be the authors of our system of United States land surveys.

2. **TOWNSHIPS.** The land is first divided into squares by lines, six miles apart. These squares are called *townships*, and a row of townships running north and south is called a *range*. Townships are given proper names but for the purpose of location, they are designated by numbers.



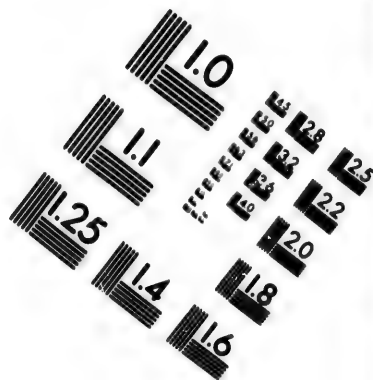
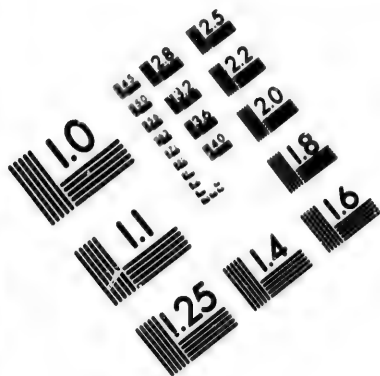
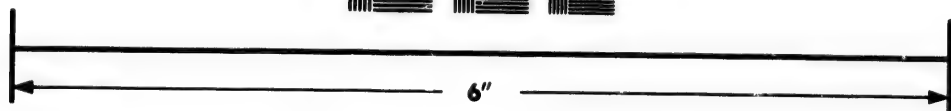
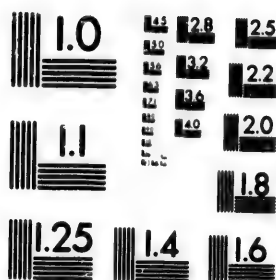


IMAGE EVALUATION TEST TARGET (MT-3)



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23 WEST MAIN STREET
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1.8 2.0 2.2 2.5
3.0 3.2 3.5 3.8
4.0 4.5 5.0 5.5

10

3. **PRINCIPAL MERIDIANS AND BASE LINES.** First the surveyors select some prominent object or point, and drawing a straight line, north and south, through this point, make what is known as the *principal meridian line*. Then drawing a line at right angles across the *principal meridian* they establish what is called a *base line*. Marks one-half mile apart are left on each of these lines throughout their entire length.

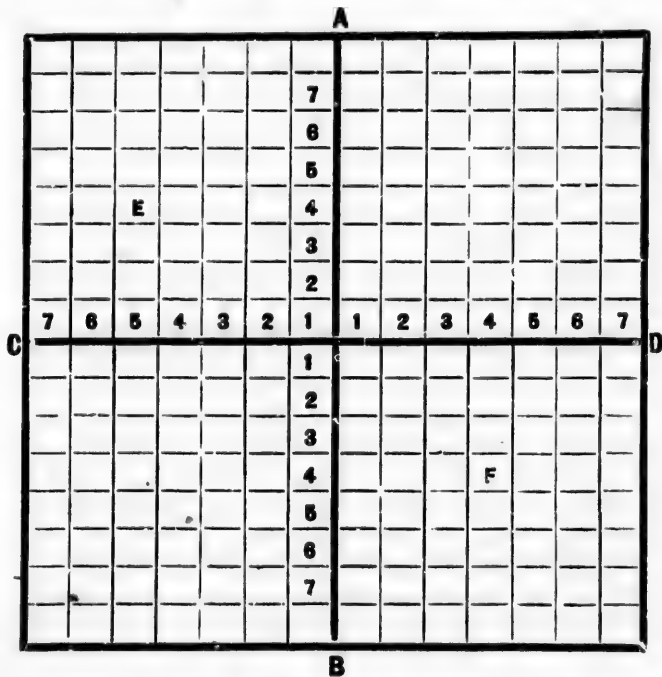


Illustration: A. B. = Principal Meridian. C. D. = Base Line. The numbers on the line A. B. mark the *township lines*, and the numbers on the line C. D. mark the *range lines*.

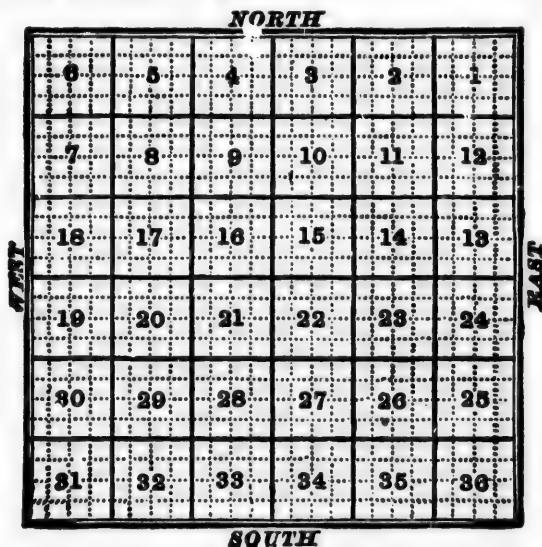
Range lines are run north and south six miles apart on both sides of the principal meridian and numbered as shown in diagram above. Township lines are run six miles apart, parallel to the base line and numbered as shown above.

Example: E. is in range 5, west, and in township 4, north,

or 30 miles west from the principal meridian and 24 miles north of the base line (each square represents a township six miles each way). F. is in range 4, east, and is in township 4, south, or 24 miles east of the principal meridian and 18 miles south of the base line.

How to Locate Land and Read and Write Descriptions.

A Township is 36 sections, each a mile square. A section is 360 acres. A quarter section, half a mile square, is 160 acres. An eighth section, half a mile long, north and south, and a quarter of a mile wide, is 80 acres. A sixteenth section, a quarter of a mile square, is 40 acres.



A TOWNSHIP WITH SECTION LINES.

1. United States survey ends with the location of the section lines. Marks are, however, made by the surveyors at the corners of the section and also half-mile marks between the corners. By these marks any piece of land may be accurately located.

2. Land is generally bought and sold in lots of 40 acres, or 80 acres, or 120 acres, or 160 acres, etc.

640 ACRES.

A	B		
B	D		
	Z	X	Y

SEC. 25.

Example: Lots A. B. C. and D. taken together are one fourth of the entire section, and described as the N. W. $\frac{1}{4}$ of Sec. 25.

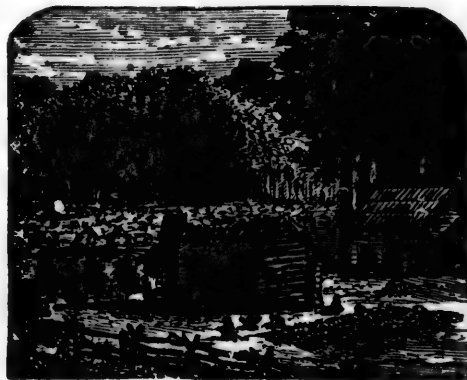
A. is described as N. W. $\frac{1}{4}$ of N. W. $\frac{1}{4}$ of Sec. 25.

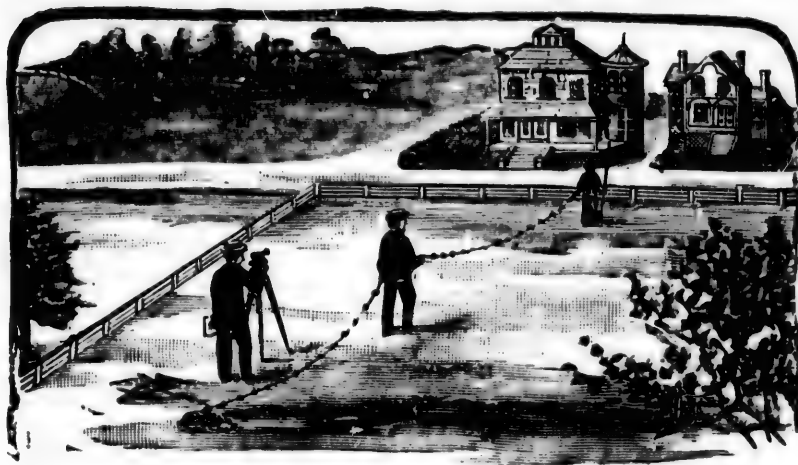
C. D. is described as S. $\frac{1}{2}$ of N. W. $\frac{1}{4}$ of Sec. 25.

X. Y. is described as N. $\frac{1}{2}$ of S. E. $\frac{1}{4}$ of Sec. 25.

Z. is described as N. E. $\frac{1}{4}$ of S. W. $\frac{1}{4}$ of Sec. 25.

N. B.—Where the government surveys cannot be used, a full description has to be written out by the county surveyor.





HOW TO MEASURE LAND AND TOWN LOTS.

FIG. 1.

RECTANGLE.

Rule to find the number of acres in a rectangular piece of land :
Multiply the length in rods by the breadth in rods, and divide by 160.

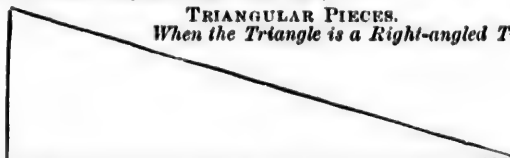
HOW TO MEASURE TOWN LOTS.

Rule.—Multiply the length in feet by the breadth in feet, and divide by 43,560 (the number of square feet in an acre).

TRIANGULAR PIECES.

When the Triangle is a Right-angled Triangle.

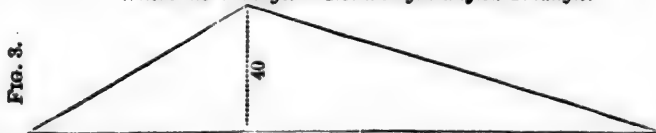
FIG. 2.



Rule—Multiply the width by the length, and divide by 2.

Example—How many acres of land in a triangular field 80 rods long and 20 rods wide? $80 \times 20 \div 2 = 1600$ sq. rods. $1600 \div 160 = 10$ acres. Ans.

Where the Triangle is Not a Right-angled Triangle.



If a triangle is without a right angle, a perpendicular has to be found.

Rule—Multiply the base in rods by the perpendicular height in rods, and divide by 2, and you have the area in square rods.

Example—How many acres in a triangular field whose base or side is 120 rods, and its width (perpendicular height) is 40 rods?

Solution : $120 \times 40 \div 2 = 2400$ sq. rods. $2400 \div 160 = 15$ acres. Ans.

HOW TO FIND THE AREA OF A PIECE OF LAND WHEN ONLY TWO OF THE OPPOSITE SIDES ARE PARALLEL.



Rule—Add the two parallel sides together, and divide by 2, and you have the average length. Then multiply the width in rods by the length in rods, and divide by 160, and you have the number of acres.

Example—How many acres of land in a field the two parallel sides of which are 60 and 100 rods long respectively, and 40 rods wide?

Solution : $60 + 100 \div 2 = 80$ sq. rods. $80 \times 40 \div 160 = 20$ acres. Ans.

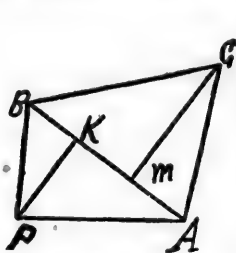


FIG. 5.

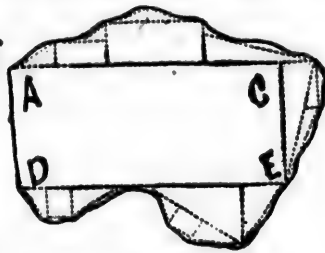


FIG. 6.

When land is irregular as in Figure 5, divide the field into triangles and use the rules under Figure 2 or 3.

When land is very irregular as in Figure 6, divide the field up into as many triangles and rectangles as may be necessary and apply the rules as given above.

HOW TO MEASURE TOWN LOTS.

Rule : Multiply the length in feet by the width in feet and divide the result by 43,560 and you will have the fractional part of an acre in the lot.

Example : What part of an acre is there in a lot 200 feet deep and 150 feet wide?

Solution : $200 \times 150 = 30,000$ sq. feet in the lot.

$\frac{30000}{43560} =$ or about $\frac{3}{5}$ of an acre.

HOW TO LAY OFF SMALL LOTS OF LAND.

Farmers and gardeners often find it necessary to lay off small portions of land for the purpose of experimenting with different crops, fertilizers, etc. To such the following rules will be helpful:

One acre contains 160 sq. rods, or 4,840 sq. yards, or 43,560 sq. feet.

To measure off

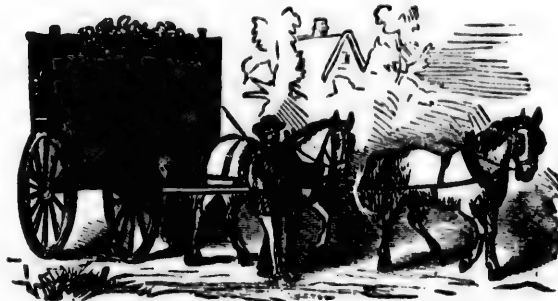
One acre it will take $208\frac{7}{10}$ feet each way.

One-half acre it will take $147\frac{1}{2}$ feet each way.

One-third acre it will take $120\frac{1}{2}$ feet each way.

One-fourth acre it will take $104\frac{1}{4}$ feet each way.

One-eighth acre it will take $73\frac{3}{4}$ feet each way.

**How to Calculate the WEIGHT of Coal in a Bin or Box.**

A solid cubic foot of anthracite coal weighs about 93 pounds. When broken for use it weighs about 54 pounds. Bituminous coal when broken up for use weighs about 50 pounds.

Rule.—Multiply the length in feet by the height in feet, and again by the breadth in feet, and this result by 54 for anthracite coal, or by 50 for bituminous coal, and the result will equal the number of pounds.

To find the number of tons, divide by 2,000.

Example: A coal bin is ten feet long, 8 feet wide, and 5 feet high. How many tons of anthracite coal will it hold?

Solution: $10 \times 8 \times 5 \times 54 = 21,600$ $21,600 \div 2,000 = 10$ tons and 1,600 pounds.

Legal Hints and Helps Concerning Interest.

1. It is the general practice of the courts in this country to award interest computed at the legal rate, from the time when payment should have been made. Interest upon a judgment dates from the time the judgment is rendered.

2. A CREDITOR may charge interest on an account from the expiration of the time of credit. When no time is specified, interest may be charged from the time payment is demanded, or when the statement of account has been rendered.

3. A DEBT for board and lodging, where there was no fixed price or time of payment fixed, will not draw interest until it is reduced to judgment, or its amount otherwise determined. Interest may not be charged upon the items of a running account until the balance is struck, and the statement rendered.

4. COMPOUND interest cannot be collected by law. When interest has already accrued and become payable, an agreement that it shall be added to the principal thus formed, will generally be deemed legal. When such interest would not be recoverable upon an ordinary contract in which its payment was agreed upon, yet, if it has actually been paid, it cannot be recovered.

5. GUARDIANS, EXECUTORS and ADMINISTRATORS, and TRUSTEES of every kind, may be charged interest upon all trust funds in their hands after their failure to invest them within a reasonable time.

6. CUSTOM : Where it is a uniform practice of the seller to charge interest and this is known to the customer or purchaser at the time when the transaction takes place, interest may be charged on book accounts.

7. PARTNERS : If a partner withdraws money from the partnership funds belonging to the firm, for private use or for the purpose of speculation, he will be liable for interest on the money so withdrawn.

8. INSURANCE POLICY : When loss occurs under a policy of insurance, it bears interest from the time it is due according to the terms of the policy.



The Celebrated Lightning Method for Calculating Interest.

WHERE THE TIME IS FOR DAYS ONLY.

Rule—To find the interest on any given sum for any number of days, multiply the principal by the number of days, and divide as follows:

- At 5 per cent., divide by 72
- At 6 per cent., divide by 60
- At 7 per cent., divide by 52
- At 8 per cent., divide by 45
- At 9 per cent., divide by 40
- At 10 per cent., divide by 36
- At 12 per cent., divide by 30

Example: What is the interest on \$900.00 for 8 days at 6 per cent.?

Solution: $900 \times 8 \div 60 = \$1.20$ interest.

WHEN THE TIME CONSISTS OF YEARS, MONTHS AND DAYS.

1. *Rule.—Reduce years to months, adding the number of months, then place $\frac{1}{10}$ of the number of days to the right of the months with a decimal point between.*
2. *Then remove the decimal point two places to the left in the principal, and divide by 2, and the result will equal the interest for one month at 6 per cent.*
3. *Multiply the interest for one month by the number of months, and the product is the interest at 6 per cent. for the given time.*

Then add $\frac{1}{6}$ of itself for 7 per cent.

" " $\frac{1}{4}$ of itself for 8 per cent.

" " $\frac{1}{2}$ of itself for 9 per cent.

" " $\frac{2}{3}$ of itself for 10 per cent.

Subtract $\frac{1}{6}$ of itself for 5 per cent.

" $\frac{1}{3}$ of itself for 4 per cent.

Example: Find the interest on \$150, at 9 per cent. for 1 year, 4 months and 12 days.

Solution: $\$150 \div 2 = .75$ interest for 1 month, 1 year, 4 months and 12 days = 16.4 months.

$.75 \times 16.4 = \$12.30$, interest at 6 per cent.

$12.30 + 6.15 = \$18.45$, interest at 9 per cent.

N. B.—The \$6.15 is one-half of \$12.30.

Banker's Method for Computing Interest.

In banking nearly all the business is transacted on the basis of 30, 60, and 90 days.

Rule.—To find the interest on any amount at 60 days, remove the decimal point two places to the left, and you have the interest at 6 per cent.

Increase or diminish according as the time is increased or diminished.

For 90 days add $\frac{1}{2}$ of itself.

For 30 days divide by 2.

For 15 days divide by 4.

For 120 days multiply by 2.

Example: What is the interest on \$240 for 90 days at 6 per cent?

2.40 interest for 60 days.

1.20 interest for $\frac{1}{2}$ of 60 days, or 30 days.

3.60 interest for 90 days.

BANKER'S TIME TABLE.

Showing the number of days from any day in one month to the same day in any other.

From To	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
Jan.	365	31	59	90	120	151	181	212	243	273	304	334
Feb.	334	365	28	59	89	120	150	181	212	242	273	303
March	306	337	365	31	61	92	122	153	184	214	245	275
April	275	306	334	365	30	61	91	122	153	183	214	244
May	245	276	304	335	365	31	61	92	123	153	184	214
June	214	245	273	304	334	365	30	61	92	122	153	183
July	184	215	243	274	304	335	365	31	62	92	123	153
Aug.	153	184	212	243	273	304	334	365	31	61	92	122
Sept.	122	153	181	212	242	273	303	334	365	30	61	91
Oct.	92	123	151	182	212	243	273	304	335	365	31	61
Nov.	61	92	120	151	181	212	242	273	304	334	365	30
Dec.	31	62	90	121	151	182	212	243	274	304	335	365

NOTE.—Find in the left-hand column the month from any day of which you wish to compute the number of days to the same day in any other month; then follow the line along until under the desired month, and you have the required number of days.

Example: How many days from May 17 to Nov. 17? 184 days. Ans.

How to Use the Interest Tables.

1. The following tables show the interest on any sum of money, and for any length of time, may be obtained, by adding to or doubling any certain sum, or length of time in the tables, viz: If the interest on a certain sum of money at eight per cent. for a given time should be \$28.00, one-half of \$28.00 or \$14.00 would equal the interest at 4%, etc.

2. If the interest at 6% should amount to \$26.00 on a certain sum of money for a given time, twice that amount or \$52.00 would equal the interest at 12%, etc.

3. The tables are computed on the principle of 360 days in a year, the rule adopted by bankers and merchants throughout the entire country.

4. When the fraction of interest is a half a cent or more, a whole cent is taken, but when less than a half cent, nothing is charged.

EXAMPLE:

To find the interest (\$1,108) for one year, three months and twenty-nine days, at 7%, according to table:

Interest on \$1,000, for 1 year, at 7 per cent., \$70.00							
"	"	100,	"	1	"	"	7
"	"	8,	"	1	"	"	56
"	"	1,000,	"	3mths.,	"	7	17.50
"	"	100,	"	3	"	"	1.75
"	"	8,	"	3	"	"	14
"	"	1,000,	"	29 days,	"	7	5.64
"	"	100,	"	29	"	"	56
"	"	8,	"	29	"	"	05

Interest on the amount.....\$103.20

INTEREST AT FIVE PER CENT.

TIME.	\$1	\$2	\$3	\$4	\$5	\$6	\$7	\$8	\$9	\$10	\$100	\$1000
1 Day.	.00	.00	.00	.00	.00	.00	.00	.00	.00	\$.00	\$.01	\$.14
2 "	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.03	.28
3 "	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.04	.42
4 "	.00	.00	.00	.00	.00	.00	.00	.00	.01	.01	.06	.56
5 "	.00	.00	.00	.00	.00	.00	.01	.01	.01	.01	.07	.69
6 "	.00	.00	.00	.00	.00	.01	.01	.01	.01	.01	.08	.83
7 "	.00	.00	.00	.00	.00	.01	.01	.01	.01	.01	.10	.97
8 "	.00	.00	.00	.00	.01	.01	.01	.01	.01	.01	.11	1.11
9 "	.00	.00	.00	.01	.01	.01	.01	.01	.01	.01	.13	1.25
10 "	.00	.00	.00	.01	.01	.01	.01	.01	.01	.01	.14	1.39
11 "	.00	.00	.00	.01	.01	.01	.01	.01	.01	.02	.15	1.53
12 "	.00	.00	.01	.01	.01	.01	.01	.01	.01	.02	.17	1.67
13 "	.00	.00	.01	.01	.01	.01	.01	.01	.02	.02	.18	1.81
14 "	.00	.00	.01	.01	.01	.01	.01	.02	.02	.02	.19	1.94
15 "	.00	.00	.01	.01	.01	.01	.01	.02	.02	.02	.21	2.08
16 "	.00	.00	.01	.01	.01	.01	.02	.02	.02	.02	.22	2.22
17 "	.00	.00	.01	.01	.01	.01	.02	.02	.02	.02	.24	2.36
18 "	.00	.01	.01	.01	.01	.02	.02	.02	.02	.03	.25	2.50
19 "	.00	.01	.01	.01	.01	.02	.02	.02	.02	.03	.26	2.64
20 "	.00	.01	.01	.01	.01	.02	.02	.02	.03	.03	.28	2.78
21 "	.00	.01	.01	.01	.01	.02	.02	.02	.03	.03	.29	2.92
22 "	.00	.01	.01	.01	.01	.02	.02	.02	.03	.03	.31	3.06
23 "	.00	.01	.01	.01	.02	.02	.02	.03	.03	.03	.32	3.19
24 "	.00	.01	.01	.01	.02	.02	.02	.03	.03	.03	.33	3.33
25 "	.00	.01	.01	.01	.02	.02	.02	.03	.03	.03	.35	3.47
26 "	.00	.01	.01	.01	.02	.02	.02	.03	.03	.04	.36	3.61
27 "	.00	.01	.01	.02	.02	.02	.03	.03	.03	.04	.38	3.75
28 "	.00	.01	.01	.02	.02	.02	.03	.03	.04	.04	.39	3.89
29 "	.00	.01	.01	.02	.02	.02	.03	.03	.04	.04	.40	4.03
1 Month.	.00	.01	.01	.02	.02	.03	.03	.03	.04	.04	.42	4.17
2 "	.01	.02	.03	.03	.04	.05	.06	.07	.08	.08	.83	8.33
3 "	.01	.03	.04	.05	.06	.08	.09	.10	.11	.13	1.25	12.50
4 "	.02	.03	.05	.07	.08	.10	.12	.13	.15	.17	1.67	16.67
5 "	.02	.04	.06	.08	.10	.13	.15	.17	.19	.21	2.08	20.83
6 "	.03	.05	.08	.10	.13	.15	.18	.20	.23	.25	2.50	25.00
7 "	.03	.06	.09	.12	.15	.18	.20	.23	.26	.29	2.92	29.17
8 "	.03	.07	.10	.13	.17	.20	.23	.27	.30	.33	3.33	33.33
8 "	.04	.08	.11	.15	.19	.23	.26	.30	.34	.38	3.75	37.50
10 "	.04	.08	.13	.17	.21	.25	.29	.33	.38	.42	4.17	41.67
11 "	.05	.09	.14	.18	.23	.28	.32	.37	.41	.46	4.58	45.83
1 Year.	.05	.10	.15	.20	.25	.30	.35	.40	.45	.50	5.00	50.00

INTEREST AT SIX PER CENT.

TIME.	\$1	\$2	\$3	\$4	\$5	\$6	\$7	\$8	\$9	\$10	\$100	\$1000
1 Day.	.00	.00	.00	.00	.00	.00	.00	.00	.00	\$.00	\$.02	\$.17
2 "	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.03	.33
3 "	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01	.05	.50
4 "	.00	.00	.00	.00	.00	.00	.01	.01	.01	.01	.07	.67
5 "	.00	.00	.00	.00	.00	.01	.01	.01	.01	.01	.08	.83
6 "	.00	.00	.00	.00	.01	.01	.01	.01	.01	.01	.10	1.00
7 "	.00	.00	.00	.00	.01	.01	.01	.01	.01	.01	.12	1.17
8 "	.00	.00	.00	.01	.01	.01	.01	.01	.01	.01	.13	1.33
9 "	.00	.00	.00	.01	.01	.01	.01	.01	.01	.02	.15	1.50
10 "	.00	.00	.01	.01	.01	.01	.01	.01	.02	.02	.17	1.67
11 "	.00	.00	.01	.01	.01	.01	.01	.01	.02	.02	.18	1.83
12 "	.00	.00	.01	.01	.01	.01	.01	.02	.02	.02	.20	2.00
13 "	.00	.00	.01	.01	.01	.01	.02	.02	.02	.02	.22	2.17
14 "	.00	.00	.01	.01	.01	.01	.02	.02	.02	.02	.23	2.33
15 "	.00	.01	.01	.01	.01	.02	.02	.02	.02	.03	.25	2.50
16 "	.00	.01	.01	.01	.01	.02	.02	.02	.02	.03	.27	2.67
17 "	.00	.01	.01	.01	.01	.02	.02	.02	.03	.03	.28	2.83
18 "	.00	.01	.01	.01	.02	.02	.02	.02	.03	.03	.30	3.00
19 "	.00	.01	.01	.01	.02	.02	.02	.03	.03	.03	.32	3.17
20 "	.00	.01	.01	.01	.02	.02	.02	.03	.03	.03	.33	3.33
21 "	.00	.01	.01	.01	.02	.02	.02	.03	.03	.04	.35	3.50
22 "	.00	.01	.01	.01	.02	.02	.02	.03	.03	.04	.37	3.67
23 "	.00	.01	.01	.02	.02	.02	.03	.03	.03	.04	.38	3.83
24 "	.00	.01	.01	.02	.02	.02	.03	.03	.04	.04	.40	4.00
25 "	.00	.01	.01	.02	.02	.03	.03	.03	.04	.04	.42	4.17
26 "	.00	.01	.01	.02	.02	.03	.03	.03	.04	.04	.43	4.33
27 "	.00	.01	.01	.02	.02	.03	.03	.04	.04	.05	.45	4.50
28 "	.00	.01	.01	.02	.02	.03	.03	.04	.04	.05	.47	4.67
29 "	.00	.01	.01	.02	.02	.03	.03	.04	.04	.05	.48	4.83
1 Month.	.01	.01	.02	.02	.03	.03	.04	.04	.05	.05	.50	5.00
2 "	.01	.02	.03	.04	.05	.06	.07	.08	.09	.10	1.00	10.00
3 "	.02	.03	.05	.06	.08	.09	.11	.12	.14	.15	1.50	15.00
4 "	.02	.04	.06	.08	.10	.12	.14	.16	.18	.20	2.00	20.00
5 "	.03	.05	.08	.10	.13	.15	.18	.20	.23	.25	2.50	25.00
6 "	.03	.06	.09	.12	.15	.18	.21	.24	.27	.30	3.00	30.00
7 "	.04	.07	.11	.14	.18	.21	.25	.28	.32	.35	3.50	35.00
8 "	.04	.08	.12	.16	.20	.24	.28	.32	.36	.40	4.00	40.00
9 "	.05	.09	.14	.18	.23	.27	.32	.36	.41	.45	4.50	45.00
10 "	.05	.10	.15	.20	.25	.30	.35	.40	.45	.50	5.00	50.00
11 "	.06	.11	.17	.22	.28	.33	.39	.44	.50	.55	5.50	55.00
1 Year.	.06	.12	.18	.24	.30	.36	.42	.48	.54	.60	6.00	60.00

INTEREST AT SEVEN PER CENT.

TIME.	\$1	\$2	\$3	\$4	\$5	\$6	\$7	\$8	\$9	\$10	\$100	\$1000
1 Day.	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	\$.02	\$.19
2 "	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.04	.39
3 "	.00	.00	.00	.00	.00	.00	.00	.00	.01	.01	.06	.58
4 "	.00	.00	.00	.00	.00	.00	.01	.01	.01	.01	.08	.78
5 "	.00	.00	.00	.00	.00	.01	.01	.01	.01	.01	.10	.97
6 "	.00	.00	.00	.00	.01	.01	.01	.01	.01	.01	.12	1.17
7 "	.00	.00	.00	.01	.01	.01	.01	.01	.01	.01	.14	1.36
8 "	.00	.00	.00	.01	.01	.01	.01	.01	.01	.02	.16	1.56
9 "	.00	.00	.01	.01	.01	.01	.01	.01	.02	.02	.18	1.75
10 "	.00	.00	.01	.01	.01	.01	.01	.02	.02	.02	.19	1.94
11 "	.00	.00	.01	.01	.01	.01	.01	.02	.02	.02	.21	2.14
12 "	.00	.00	.01	.01	.01	.01	.02	.02	.02	.02	.23	2.33
13 "	.00	.01	.01	.01	.01	.02	.02	.02	.02	.03	.25	2.53
14 "	.00	.01	.01	.01	.01	.02	.02	.02	.02	.03	.27	2.72
15 "	.00	.01	.01	.01	.01	.02	.02	.02	.03	.03	.29	2.92
16 "	.00	.01	.01	.01	.02	.02	.02	.03	.03	.03	.31	3.11
17 "	.00	.01	.01	.01	.02	.02	.02	.03	.03	.03	.33	3.31
18 "	.00	.01	.01	.01	.02	.02	.02	.03	.03	.04	.35	3.50
19 "	.00	.01	.01	.01	.02	.02	.03	.03	.03	.04	.37	3.69
20 "	.00	.01	.01	.02	.02	.02	.03	.03	.04	.04	.39	3.89
21 "	.00	.01	.01	.02	.02	.02	.03	.03	.04	.04	.41	4.08
22 "	.00	.01	.01	.02	.02	.02	.03	.03	.04	.04	.43	4.28
23 "	.00	.01	.01	.02	.02	.03	.03	.04	.04	.04	.45	4.47
24 "	.00	.01	.01	.02	.02	.03	.03	.04	.04	.05	.47	4.67
25 "	.00	.01	.01	.02	.02	.03	.03	.04	.04	.05	.49	4.86
26 "	.01	.01	.02	.02	.03	.03	.04	.04	.05	.05	.51	5.06
27 "	.01	.01	.02	.02	.03	.03	.04	.04	.05	.05	.53	5.25
28 "	.01	.01	.02	.02	.03	.03	.04	.04	.05	.05	.54	5.44
29 "	.01	.01	.02	.02	.03	.03	.04	.05	.05	.05	.56	5.64
1 Month.	.01	.01	.02	.02	.03	.04	.04	.05	.05	.06	.58	5.83
2 "	.01	.02	.04	.05	.06	.07	.08	.09	.11	.12	1.17	11.67
3 "	.02	.04	.05	.07	.09	.11	.12	.14	.16	.18	1.75	17.50
4 "	.02	.05	.07	.09	.12	.14	.16	.19	.21	.23	2.33	23.33
5 "	.03	.06	.09	.12	.15	.18	.20	.23	.26	.29	2.92	29.17
6 "	.04	.07	.11	.14	.18	.21	.25	.28	.32	.35	3.50	35.00
7 "	.04	.08	.12	.16	.20	.25	.29	.33	.37	.41	4.08	40.83
8 "	.05	.09	.14	.19	.23	.28	.33	.37	.42	.47	4.67	46.67
9 "	.05	.11	.16	.21	.26	.32	.37	.42	.47	.53	5.25	52.50
10 "	.06	.12	.18	.23	.29	.35	.41	.47	.53	.58	5.83	58.33
11 "	.06	.13	.19	.26	.32	.39	.45	.51	.58	.64	6.42	64.17
1 Year.	.07	.14	.21	.28	.35	.42	.49	.56	.63	.70	7.00	70.00

INTEREST AT EIGHT PER CENT.

TIME.	\$1	\$2	\$3	\$4	\$5	\$6	\$7	\$8	\$9	\$10	\$100	\$1000
1 Day.	.00	.00	.00	.00	.00	.00	.00	.00	.00	\$.00	\$.02	\$.22
2 "	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.04	.44
3 "	.00	.00	.00	.00	.00	.00	.00	.01	.01	.01	.07	.67
4 "	.00	.00	.00	.00	.00	.01	.01	.01	.01	.01	.09	.89
5 "	.00	.00	.00	.00	.01	.01	.01	.01	.01	.01	.11	1.11
6 "	.00	.00	.00	.01	.01	.01	.01	.01	.01	.01	.13	1.33
7 "	.00	.00	.00	.01	.01	.01	.01	.01	.01	.02	.16	1.56
8 "	.00	.00	.01	.01	.01	.01	.01	.01	.02	.02	.18	1.78
9 "	.00	.00	.01	.01	.01	.01	.01	.02	.02	.02	.20	2.00
10 "	.00	.00	.01	.01	.01	.01	.02	.02	.02	.02	.22	2.22
11 "	.00	.00	.01	.01	.01	.01	.02	.02	.02	.02	.24	2.44
12 "	.00	.01	.01	.01	.01	.02	.02	.02	.02	.03	.27	2.67
13 "	.00	.01	.01	.01	.01	.02	.02	.02	.03	.03	.29	2.89
14 "	.00	.01	.01	.01	.02	.02	.02	.02	.03	.03	.31	3.11
15 "	.00	.01	.01	.01	.02	.02	.02	.03	.03	.03	.33	3.33
16 "	.00	.01	.01	.01	.02	.02	.02	.03	.03	.04	.36	3.56
17 "	.00	.01	.01	.02	.02	.02	.03	.03	.03	.04	.38	3.78
18 "	.00	.01	.01	.02	.02	.02	.03	.03	.04	.04	.40	4.00
19 "	.00	.01	.01	.02	.02	.03	.03	.03	.04	.04	.42	4.22
20 "	.00	.01	.01	.02	.02	.03	.03	.04	.04	.04	.44	4.44
21 "	.00	.01	.01	.02	.02	.03	.03	.04	.04	.05	.47	4.67
22 "	.00	.01	.01	.02	.02	.03	.03	.04	.04	.05	.49	4.89
23 "	.01	.01	.02	.02	.03	.03	.04	.04	.05	.05	.51	5.11
24 "	.01	.01	.02	.02	.03	.03	.04	.04	.05	.05	.53	5.33
25 "	.01	.01	.02	.02	.03	.03	.04	.04	.05	.06	.56	5.56
26 "	.01	.01	.02	.02	.03	.03	.04	.05	.05	.06	.58	5.78
27 "	.01	.01	.02	.02	.03	.04	.04	.05	.05	.06	.60	6.00
28 "	.01	.01	.02	.02	.03	.04	.04	.05	.06	.06	.62	6.22
29 "	.01	.01	.02	.03	.03	.04	.05	.05	.06	.06	.64	6.44
1 Month.	.01	.01	.02	.03	.03	.04	.05	.05	.06	.07	.67	6.67
2 "	.01	.03	.04	.05	.07	.08	.09	.11	.12	.13	1.33	13.33
3 "	.02	.04	.06	.08	.10	.12	.14	.16	.18	.20	2.00	20.00
4 "	.03	.05	.08	.11	.13	.16	.19	.21	.24	.27	2.67	26.67
5 "	.03	.07	.10	.13	.17	.20	.23	.27	.30	.33	3.33	33.33
6 "	.04	.08	.12	.16	.20	.24	.28	.32	.36	.40	4.00	40.00
7 "	.05	.09	.14	.19	.23	.28	.33	.37	.42	.47	4.67	46.67
8 "	.05	.11	.16	.21	.27	.32	.37	.43	.48	.53	5.33	53.33
9 "	.06	.12	.18	.24	.30	.36	.42	.48	.54	.60	6.00	60.00
10 "	.07	.13	.20	.27	.33	.40	.47	.53	.60	.67	6.67	66.67
11 "	.07	.15	.22	.29	.37	.44	.51	.59	.66	.73	7.33	73.33
1 Year.	.08	.16	.24	.32	.40	.48	.56	.64	.72	.80	8.00	80.00

INTEREST AT NINE PER CENT.

TIME.	\$1	\$2	\$3	\$4	\$5	\$6	\$7	\$8	\$9	\$10	\$100	\$1000
1 Day.	.00	.00	.00	.00	.00	.00	.00	.00	.00	\$.00	\$.02	\$.25
2 "	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	.50
3 "	.00	.00	.00	.00	.00	.00	.00	.01	.01	.01	.08	.75
4 "	.00	.00	.00	.00	.00	.01	.01	.01	.01	.01	.10	1.00
5 "	.00	.00	.00	.00	.01	.01	.01	.01	.01	.01	.12	1.25
6 "	.00	.00	.00	.01	.01	.01	.01	.01	.01	.02	.15	1.50
7 "	.00	.00	.00	.01	.01	.01	.01	.01	.02	.02	.17	1.75
8 "	.00	.00	.01	.01	.01	.01	.01	.02	.02	.02	.20	2.00
9 "	.00	.00	.01	.01	.01	.01	.02	.02	.02	.02	.23	2.25
10 "	.00	.00	.01	.01	.01	.02	.02	.02	.02	.02	.25	2.50
11 "	.00	.00	.01	.01	.01	.02	.02	.02	.02	.03	.27	2.75
12 "	.00	.01	.01	.01	.02	.02	.02	.02	.03	.03	.30	3.00
13 "	.00	.01	.01	.01	.02	.02	.02	.03	.03	.03	.32	3.25
14 "	.00	.01	.01	.01	.02	.02	.02	.03	.03	.03	.35	3.50
15 "	.00	.01	.01	.02	.02	.02	.03	.03	.03	.04	.38	3.75
16 "	.00	.01	.01	.02	.02	.02	.03	.03	.04	.04	.40	4.00
17 "	.00	.01	.01	.02	.02	.03	.03	.03	.04	.04	.42	4.25
18 "	.00	.01	.01	.02	.02	.03	.03	.04	.04	.05	.45	4.50
19 "	.00	.01	.01	.02	.02	.03	.03	.04	.04	.05	.47	4.75
20 "	.00	.01	.01	.02	.02	.03	.03	.04	.05	.05	.50	5.00
21 "	.00	.01	.01	.02	.03	.03	.04	.04	.05	.05	.53	5.25
22 "	.00	.01	.01	.02	.03	.03	.04	.04	.05	.05	.55	5.50
23 "	.00	.01	.02	.02	.03	.03	.04	.05	.05	.06	.57	5.75
24 "	.01	.01	.02	.02	.03	.03	.04	.05	.05	.06	.60	6.00
25 "	.01	.01	.02	.02	.03	.04	.04	.05	.06	.06	.62	6.25
26 "	.01	.01	.02	.03	.03	.04	.05	.05	.06	.06	.65	6.50
27 "	.01	.01	.02	.03	.03	.04	.05	.05	.06	.07	.68	6.75
28 "	.01	.01	.02	.03	.03	.04	.05	.06	.06	.07	.70	7.00
29 "	.01	.01	.02	.03	.03	.04	.05	.06	.06	.07	.72	7.25
1 Month.	.01	.02	.02	.03	.04	.05	.05	.06	.07	.08	.75	7.50
2 "	.02	.03	.05	.06	.08	.09	.11	.12	.14	.15	1.50	15.00
3 "	.02	.05	.07	.09	.11	.14	.16	.18	.20	.23	2.25	22.50
4 "	.03	.06	.09	.12	.15	.18	.21	.24	.27	.30	3.00	30.00
5 "	.04	.08	.11	.15	.19	.23	.26	.30	.34	.38	3.75	37.50
6 "	.05	.09	.14	.18	.23	.27	.32	.36	.41	.45	4.50	45.00
7 "	.05	.11	.16	.21	.26	.32	.37	.42	.47	.53	5.25	52.50
8 "	.06	.12	.18	.24	.30	.36	.42	.48	.54	.60	6.00	60.00
9 "	.06	.14	.20	.27	.33	.41	.47	.54	.60	.68	6.75	67.50
10 "	.08	.15	.23	.30	.38	.45	.53	.60	.68	.75	7.50	75.00
11 "	.08	.17	.24	.33	.41	.50	.57	.66	.74	.83	8.25	82.50
1 Year.	.09	.18	.27	.36	.45	.54	.63	.72	.81	.90	9.00	90.00

INTEREST AT TEN PER CENT.

TIME.	\$1	\$2	\$3	\$4	\$5	\$6	\$7	\$8	\$9	\$10	\$100	\$1000
1 Day.	.00	.00	.00	.00	.00	.00	.00	.00	.00	\$.00	\$.03	\$.28
2 "	.00	.00	.00	.00	.00	.00	.00	.00	.01	.01	.06	.56
3 "	.00	.00	.00	.00	.01	.01	.01	.01	.01	.01	.08	.83
4 "	.00	.00	.00	.00	.01	.01	.01	.01	.01	.01	.11	1.11
5 "	.00	.00	.00	.01	.01	.01	.01	.01	.01	.01	.14	1.39
6 "	.00	.00	.01	.01	.01	.01	.01	.01	.02	.02	.17	1.67
7 "	.00	.00	.01	.01	.01	.01	.01	.01	.02	.02	.19	1.94
8 "	.00	.00	.01	.01	.01	.01	.02	.02	.02	.02	.22	2.22
9 "	.00	.01	.01	.01	.01	.02	.02	.02	.02	.03	.25	2.50
10 "	.00	.01	.01	.01	.01	.02	.02	.02	.03	.03	.28	2.78
11 "	.00	.01	.01	.01	.02	.02	.02	.02	.03	.03	.31	3.06
12 "	.00	.01	.01	.01	.02	.02	.02	.02	.03	.03	.33	3.33
13 "	.00	.01	.01	.01	.02	.02	.03	.03	.03	.04	.36	3.61
14 "	.00	.01	.01	.02	.02	.02	.03	.03	.04	.04	.39	3.89
15 "	.00	.01	.01	.02	.02	.03	.03	.03	.04	.04	.42	4.17
16 "	.00	.01	.01	.02	.02	.03	.03	.04	.04	.04	.44	4.44
17 "	.00	.01	.01	.02	.02	.03	.03	.04	.04	.05	.47	4.72
18 "	.01	.01	.02	.02	.03	.03	.04	.04	.05	.05	.50	5.00
19 "	.01	.01	.02	.02	.03	.03	.04	.04	.05	.05	.53	5.28
20 "	.01	.01	.02	.02	.03	.03	.04	.04	.05	.06	.56	5.56
21 "	.01	.01	.02	.02	.03	.04	.04	.05	.05	.06	.58	5.83
22 "	.01	.01	.02	.02	.03	.04	.04	.05	.06	.06	.61	6.11
23 "	.01	.01	.02	.03	.03	.04	.04	.05	.06	.06	.64	6.39
24 "	.01	.01	.02	.03	.03	.04	.05	.05	.06	.07	.67	6.67
25 "	.01	.01	.02	.03	.03	.04	.05	.06	.06	.07	.69	6.94
26 "	.01	.01	.02	.03	.04	.04	.05	.06	.07	.07	.72	7.22
27 "	.01	.02	.02	.03	.04	.05	.05	.06	.07	.08	.75	7.50
28 "	.01	.02	.02	.03	.04	.05	.05	.06	.07	.08	.78	7.78
29 "	.01	.02	.02	.03	.04	.05	.06	.06	.07	.08	.81	8.06
1 Month.	.01	.02	.03	.03	.04	.05	.06	.07	.08	.08	.83	8.33
2 "	.02	.03	.05	.07	.08	.10	.12	.13	.15	.17	1.67	16.67
3 "	.03	.05	.08	.10	.13	.15	.18	.20	.23	.25	2.50	25.00
4 "	.03	.07	.10	.13	.17	.20	.23	.27	.30	.33	3.33	33.33
5 "	.04	.08	.13	.17	.21	.25	.29	.33	.38	.42	4.17	41.67
6 "	.05	.10	.15	.20	.25	.30	.35	.40	.45	.50	5.00	50.00
7 "	.06	.12	.18	.23	.29	.35	.41	.47	.53	.58	5.83	58.33
8 "	.07	.13	.20	.27	.33	.40	.47	.53	.60	.67	6.67	66.67
9 "	.08	.15	.23	.30	.38	.45	.53	.60	.68	.75	7.50	75.00
10 "	.08	.17	.25	.33	.42	.50	.58	.67	.75	.83	8.33	83.33
11 "	.09	.18	.28	.37	.46	.55	.64	.73	.83	.92	9.17	91.67
1 Year.	.10	.20	.30	.40	.50	.60	.70	.80	.90	1.00	10.00	100.00

Time at which Money Doubles at Interest.

<i>Rate per cent.</i>	<i>Simple Interest.</i>	<i>Compound Interest.</i>
2.....	50 years.	35 years 1 day.
2½.....	40 years.	28 years 26 days.
3.....	33 years 4 months.	23 years 164 days.
3½.....	28 years 208 days.	20 years 54 days.
4.....	25 years.	17 years 246 days.
4½.....	22 years 81 days.	15 years 273 days.
5.....	20 years.	15 years 75 days.
6.....	16 years 8 months.	12 years 327 days.
7.....	14 years 104 days.	10 years 89 days.
8.....	12½ years.	9 years 2 days.
9.....	11 years 40 days.	8 years 16 days.
10.....	10 years.	7 years 100 days.



OIL WELLS OF THE STANDARD OIL COMPANY.

The Standard Oil Company was one of the first companies to organize a "trust."

TRUSTS.**What Trusts are, and How they are Organized.**

1. The name is certainly innocent, but the abuses and wrongs growing out of it are alarming.
2. It is organized or brought about in the following way: A majority of those dealing in, or manufacturing special, or certain articles unite their capital and form a corporation with a capital of two or three times that actually invested in.

Interest.

1 day.
 26 days.
 54 days.
 54 days.
 46 days.
 73 days.
 75 days.
 27 days.
 39 days.
 2 days.
 16 days.
 00 days.

the business. Thus the capital stock of each individual or corporate member of the trust is doubled without the investment of an additional dollar. When this is done, the corporation is so managed that it pays on this doubled or trebled capital stock dividends as great or greater than the earnings before secured separately.

3. The "Trust" has absolute command of the product which it is formed to control, so that it is able to name its price and profits.

4. If the supply is too large, certain of the mills or factories or refineries in the association are closed, and the owners can make no objections because they are partners in the scheme, and are sure of their dividends, on two or three times the capital they had invested in their former business. Reducing the production only makes their dividends more certain.

5. **OBJECT.**—It is very easily seen that the "trust" is but a dishonest device to destroy competition, and to swell the profits of the manufacturers, or operators, or dealers, without a dollar of additional capital being put into the business.

6. **RESULT.**—The results are, that the consumer pays the increased profits of the bogus capital of the corporation, and the producer has to accept for his products just what the managers of the "trust" choose to pay.

7. **ROBBERY.**—It is organized robbery, and nothing less, and should be treated by our courts the same as any other stealing.



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Interest Laws of Canada and the United States.

STATES AND TERRITORIES.	PENALTY OF USURY.	Legal.	SPECIAL.
Canada.....		6	No limit.
New Brunswick.....		6	"
Nova Scotia.....		6	"
Alabama.....	Loss of interest.....	8	
Arizona.....	No penalty.....	10	No limit.
Arkansas.....	Forfeiture of principal and interest.....	6	10 per ct.
California.....	No penalty.....	10	No limit.
Colorado.....	" ".....	8	"
Connecticut.....	" ".....	6	6 per ct.
Dakota.....	Forfeiture of contract.....	7	12 per ct.
Delaware.....	" " ".....	6	6 per ct.
Dist. of Col.....	" " all interest.....	6	10 per ct.
Florida.....	No penalty.....	8	No limit.
Georgia.....	Forfeiture of all interest.....	7	8 per ct.
Idaho.....	Forfeiture of three times the excess of interest over 18 per cent.*.....	10	18 per ct.
Illinois.....	Forfeiture of all interest.....	5	7 per ct.
Indiana.....	" " interest over 6 per cent.....	6	8 per ct.
Iowa.....	" " interest and costs.....	6	8 per ct.
Kansas.....	" " twice the excess of interest.....	6	10 per ct.
Kentucky.....	" " twice of interest.....	6	6 per ct.
Louisiana.....	" " interest.....	5	8 per ct.
Maine.....	No penalty.....	6	No limit.
Maryland.....	Forfeiture of excess.....	6	6 per ct.
Massachusetts.....	No penalty—6 per cent. on judgments.....	6	No limit.
Michigan.....	Forfeiture of excess.....	7	10 per ct.
Minnesota.....	Forfeiture of contract if more than 10 per cent is charged.....	7	10 per ct.
Mississippi.....	Forfeiture of interest over 10 per cent.....	6	10 per ct.
Missouri.....	Forfeiture of all interest.....	6	10 per ct.
Montana.....	No penalty.....	10	No limit.
Nebraska.....	Forfeiture of all interest and costs.....	7	10 per ct.
Nevada.....	No penalty.....	10	No limit.
N. Hampshire.....	Forfeiture of three times excess of interest.....	6	6 per ct.
New Jersey.....	Forfeiture of all interest and costs.....	6	6 per ct.
New Mexico.....	No penalty.....	6	No limit.
New York.....	Forfeiture of contract.†.....	6	6 per ct.
North Carolina.....	Forfeiture of double the amount of interest.....	6	8 per ct.
Ohio.....	Forfeiture of excess.....	6	8 per ct.
Oregon.....	" " principal, interest and costs.....	10	12 per ct.
Pennsylvania.....	" " excess, Act of 1858.....	6	6 per ct.
Rhode Island.....	" " unless by contract.‡.....	6	No limit.
South Carolina.....	" " of all the interest.....	7	7 per ct.
Tennessee.....	" " of excess over 6 per cent.....	6	6 per ct.
Texas.....	" " of all interest.....	8	12 per ct.
Utah.....	No penalty.....	10	No limit.
Vermont.....	Forfeiture of excess on R. R. bonds.....	6	7 per ct.
Virginia.....	" " interest.....	6	
Wash. Ter.....	No penalty.....	10	No limit.
West Virginia.....	Forfeiture of excess.....	6	6 per ct.
Wisconsin.....	" " all interest.....	7	10 per ct.
Wyoming.....	No penalty.....	10	No limit.

* Act of Feb. 21, 1879.

† Also punishable as a misdemeanor.

‡ Also 6 per cent. on judgments.

COMPOUND INTEREST TABLE.

Showing the amount of \$1 from 1 to 15 years at compound interest, interest added semi-annually, at different rates. This table will be found valuable in computing interest on Savings Bank deposits, &c.

YEARS	3	4	5	6	7	8	10
	Per Cent.	Per Cent.	Per Cent.	Per Cent.	Per Cent.	Per Cent.	Per Cent.
$\frac{1}{2}$	1.015000	1.020000	1.025000	1.030000	1.035000	1.040000	1.050000
1	1.03225	1.040400	1.050625	1.060900	1.071225	1.081600	1.102500
$1\frac{1}{2}$	1.045678	1.061208	1.076890	1.092727	1.108718	1.124864	1.157625
2	1.061363	1.082432	1.103813	1.125509	1.147523	1.169858	1.215506
$2\frac{1}{2}$	1.077284	1.104081	1.131408	1.159274	1.187686	1.216653	1.276281
3	1.093443	1.126162	1.159693	1.194052	1.229255	1.265319	1.340096
$3\frac{1}{2}$	1.109845	1.148685	1.188685	1.229874	1.272279	1.316931	1.407100
4	1.126492	1.171659	1.218403	1.266770	1.316809	1.368569	1.477455
$4\frac{1}{2}$	1.143390	1.195092	1.248863	1.304773	1.363897	1.423312	1.551328
5	1.160541	1.218994	1.280001	1.343916	1.410598	1.480244	1.628894
$5\frac{1}{2}$	1.177949	1.243374	1.312086	1.384234	1.459969	1.539464	1.710359
6	1.195618	1.268241	1.344888	1.425761	1.511068	1.601032	1.795856
$6\frac{1}{2}$	1.213552	1.293606	1.378511	1.468533	1.563956	1.665073	1.885649
7	1.231755	1.319478	1.412973	1.512589	1.618694	1.731676	1.979931
$7\frac{1}{2}$	1.250232	1.345868	1.448298	1.557967	1.675349	1.800943	2.078928

YEARS	3	4	5	6	7	8	10
	Per Cent.	Per Cent.	Per Cent.	Per Cent.	Per Cent.	Per Cent.	Per Cent.
8	1.268985	1.372785	1.484505	1.604706	1.733986	1.872981	2.182874
$8\frac{1}{2}$	1.288020	1.400241	1.521618	1.652817	1.794675	1.947900	2.292019
9	1.307340	1.428246	1.559658	1.702433	1.857489	2.025816	2.406619
$9\frac{1}{2}$	1.326950	1.456811	1.598650	1.753506	1.922501	2.106849	2.526950
10	1.346855	1.485947	1.638616	1.806111	1.989789	2.191123	2.653297
$10\frac{1}{2}$	1.367058	1.515666	1.679581	1.860294	2.059431	2.278768	2.785862
11	1.387563	1.545980	1.721571	1.916103	2.131511	2.369919	2.925260
$11\frac{1}{2}$	1.408377	1.576899	1.764610	1.973586	2.206114	2.464715	3.071523
12	1.429503	1.608437	1.808726	2.032794	2.283328	2.563304	3.225100
$12\frac{1}{2}$	1.450945	1.640606	1.853944	2.093778	2.363245	2.665836	3.386355
13	1.472709	1.673418	1.900292	2.156591	2.445959	2.772470	3.555672
$13\frac{1}{2}$	1.494800	1.706886	1.947800	2.221289	2.531567	2.883364	3.733456
14	1.517222	1.741024	1.996595	2.287927	2.620172	2.998703	3.920129
$14\frac{1}{2}$	1.539960	1.775845	2.046407	2.356565	2.711878	3.118651	4.116135
15	1.563080	1.811361	2.097567	2.427262	2.806793	3.243397	4.321940

Example.—What will \$400. amount to in 8 years and 6 months at 4 per cent. compound interest, interest added semi-annually? Referring to table, it is found \$1. in 8 years and 6 months at 4 per cent. will amount to \$1.400241. The amount of \$400. will be 400 times this or \$560.0964.

NOTE.—If the interest only be wanted, deduct the principal \$400. from \$560.0964.



HOW TO SEND MONEY BY MAIL.

BANK DRAFTS. A draft on some reliable bank is by far the best and most business-like way to send large amounts of money. It is safe, convenient, and cheap.

Better, however, have the draft issued in your favor (to your own order), and then indorse it, and make it payable to the party to whom you intend to send it. (See indorsement on page 61.)

POST OFFICE ORDER. By Post Office Order is also a safe and reliable way to send money. It costs a little more than to remit by draft, but it is equally as secure, and many times more convenient, because the Post Office is accessible at all hours of the day.

REGISTERED LETTERS. The Government promises special care in handling and transmitting a Registered Letter or Package, but should it be lost, the owner is the loser, and not the Government. Money sent by *Registered Letter is always at the risk of the sender.*

POSTAL NOTES. In sending small amounts of money the postal note very conveniently answers the purpose. But should it be lost or stolen, the sender has no remedy, for the Government does not assume any responsibility.

EXPRESS ORDERS. The Express Order, as to security, has all the advantages of the Bank Draft or Post Office Order. Serious disadvantages often arise, however, when the Express office on which the order is drawn has not the money on hand to pay it, consequently the holder of the order has to wait the slow action of the company's agents in getting the amount forwarded from some other office.

INTERNATIONAL OR FOREIGN MONEY-ORDER FEES.

On Algeria, Belgium, British India, Cape Colony, Constantinople, Denmark, Dominion of Canada, Egypt, England, France, German Empire, Hong Kong, Ireland, Italy, Jamaica, Japan, Newfoundland, New South Wales, New Zealand, Portugal, Sandwich Islands, Scotland, Shanghai, Sweden, Switzerland, Tasmania, Victoria.

For sums not exceeding \$10..... 10 cents
 Over \$10, not exceed. \$20.....20 c. | Over \$30, not exceed \$40.....40 c.
 Over \$20, not exceed. \$30.....30 c. | Over \$40, not exceed. \$50.....50 c.

Orders can also be obtained on Austria and the East Indies, by remittance through the Postal Department of Switzerland, subject to the rates of the Swiss Department to those countries. Also on Norway and the Netherlands, through the Postal Department of the German Empire, subject to the rates of the German Department to those countries.

No order issued for a larger amount than \$50 in U. S. money.

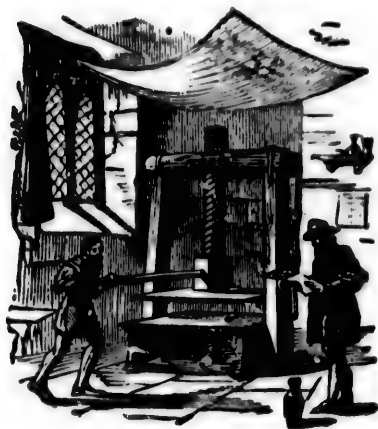


VALUE OF ANCIENT MONEY.

Denomination.	Grains.	Gold Value.
Gold Shekel.....	132	\$5.69
Gold Maneh.....	13,200	569.00
Gold Talent.....	1,320,000	56,900.00
Silver Gerah.....	11	.02 $\frac{1}{2}$
Silver Beka.....	110	.26 $\frac{1}{2}$
Silver Shekel.....	200	.53
Silver Maneh.....	13,200	32.00
Silver Talent.....	660,000	1,660.00
Copper Shekel.....	528	.03 14-100
Persian Daric or Dram (gold).....	128	5.52
Maccabæan Shekel (silver).....	220	.53
"Piece of Money" (stater silver).....	220	.53
Penny (Denarius, silver).....	58 6-7	.14
Farthing (Quadrans, copper).....	42	.00 $\frac{1}{4}$
Farthing (Assarium, copper).....	84	.00 $\frac{1}{2}$
Mite (copper).....	21	.00 $\frac{1}{8}$

THE VALUE OF FOREIGN GOLD AND SILVER COINS.

COUNTRY.	GOLD COINS.	Value	SILVER COINS.	Value
Australia	Pound of 1852.....	\$5.32	.....	.....
"	Sovereign of 1855-60.....	4.85	.....	.....
Austria	Ducat	2.28	Old rix dollar.....	\$1 02
"	Souverain.....	6.75	Old scudo.....	1.02
"	New Union Crown (assumed).....	6.64	Florin before 1858.....	51
" .....	.....	.....	New florin.....	48
" .....	.....	.....	New Union dollar.....	73
" .....	.....	.....	Maria Theresa dollar, 1780.....	1.02
Belgium.....	Twenty-five-francs.....	4.72	Five francs.....	98
Bolivia.....	Doubloon.....	15.59	New dollar.....	79
" .....	.....	.....	Half dollar.....	39
Brazil.....	Twenty milreis.....	10.90	Double milreis.....	1.02
Central America.....	Two escudos.....	3.68	Dollar.....	1 00
Chili.....	Old doubloon.....	15.59	Old dollar.....	1.00
"	Ten pesos.....	9.15	New dollar.....	98
Denmark.....	Ten thaler.....	7.90	Two rigsdaler.....	1.10
Ecuador.....	Four escudos.....	7.55	.....	.....
England	Pound or sovereign, new.....	4.86	Shilling, new.....	22
"	Pound or sovereign, average.....	4.84	Shilling, average.....	22
France.....	Twenty francs, new.....	3.85	Five franc, average.....	98
"	Twenty francs, average.....	3.84	.....	.....
Germany, North.....	Ten thaler.....	7.90	Thaler, before 1857.....	72
"	Ten thaler, Prussian.....	7.97	New thaler.....	72
"	Krone (crown).....	6.64	.....	.....
Germany, South.....	Ducat	2.28	Florin, before 1857.....	41
" .....	.....	.....	New florin (assumed).....	41
Greece.....	Twenty drachms.....	3.44	Five drachms.....	88
Hindustan.....	Mohur.....	7.08	Rupce.....	46
Italy.....	Twenty lire.....	3.84	.....	.....
Japan.....	Old cobang.....	4.44	Itzebu.....	37
"	New cobang.....	3.57	New Itzebu.....	33
Mexico.....	Doubloon, average.....	15.52	Dollar, new.....	1.06
"	Doubloon, new.....	15.61	Dollar, average.....	1.06
Naples.....	Six ducati, new.....	5.04	Scudo.....	95
Netherlands.....	Ten guilders.....	3.99	Two-and-a-half guild.....	1.03
Norway.....	.....	.....	Specie daler.....	1.10
New Granada	Old doubloon, Bogota.....	15.61	Dollar of 1857.....	97
"	Old doubloon, Popayan.....	15.37	.....	.....
"	Ten pesos, new.....	9.67	.....	.....
Peru.....	Old doubloon.....	15.55	Old dollar.....	1.06
"	Twenty soles.....	19.21	Dollar of 1858.....	94
" .....	.....	.....	Half-dollar, 1835-38.....	38
Portugal.....	Gold Crown.....	5.80	.....	.....
Prussia.....	New Union Crown (assumed).....	6.64	Thaler before 1857.....	72
" .....	.....	.....	New thaler.....	72
Rome.....	Two-and-a-half scudi, new.....	2.60	Scudo.....	1.05
Russia.....	Five roubles.....	3.97	Rouble.....	79
Sardinia.....	.....	.....	Five lire.....	98
Spain.....	One hundred reals.....	4.96	New pistareen.....	20
"	Eighty reals.....	3.86	.....	.....
Sweden.....	Ducat	2.23	Rix dollar.....	1.11
Switzerland.....	.....	.....	Two francs.....	39
Tunis.....	Twenty-five piastres.....	2.99	Five piastres.....	62
Turkey.....	One hundred piastres.....	4.36	Twenty piastres.....	84
Tuscany.....	Sequin.....	2.31	Florin.....	7



THE FIRST PRINTING PRESS.

THE LAW OF NEWSPAPER SUBSCRIPTIONS.

1. There is no postal law regulating the transactions between publishers and subscribers. The ordinary rules of contract govern all relations between the parties concerned, and the post-office has no part except to deliver the article, or return it when ordered to do so.

2. If the publisher of any paper or periodical sends his paper or magazine, the Postmaster must deliver it, if the person to whom it is sent will take it. If he will not take it, the Postmaster must notify the publisher.

3. The publisher must collect his subscription the same as any other debt.

4. If a man subscribes for a paper or periodical for one year, he cannot stop his paper at any time during that year, but at the end of the year he can stop his paper, whether he has paid for it or not.

5. If at the end of the year the publisher continues to send his paper and the subscriber to receive it, the sending is the offer of another year's subscription at the same price, and the taking of the paper out of the post-office is an acceptance.

6. If a subscriber has by express or implied agreement become liable for another year's subscription, he cannot during and before the expiration of that year stop his paper, even by paying up all he owes to the publisher.

7. If the publisher advertises terms of subscription, all parties taking the paper under these conditions will be held according to the conditions.

Value

\$1 02

1.02

51

48

73

80. 1.02

98

79

39

1.02

1 00

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98

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22

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72

41

41

88

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37

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1.06

1.06

95

1.03

1.10

97

1.06

94

38

72

72

1.05

79

98

20

1.11

39

62

84

7

Tables of Weights and Measures.

TROY WEIGHT.

24 grains make 1 pennyweight, 20 pennyweights make 1 ounce. By this weight gold, silver and jewels only are weighed. The ounce and pound in this, are same as in Apothecarys' weight.

APOTHECARYS' WEIGHT.

20 grains make one scruple, 3 scruples make 1 drachm, 8 drachms make 1 ounce 12 ounces make 1 pound.

AVOIRDUPOIS WEIGHT.

16 drachms make 1 ounce, 16 ounces make 1 pound, 25 pounds make 1 quarter, 4 quarters make 100-weight, 2,000 pounds make a ton.

DRY MEASURE.

2 pints make 1 quart, 8 quarts make 1 peck, 4 pecks make one bushel, 36 bushels make 1 chaldron.

LIQUID OR WINE MEASURE.

4 gills make 1 pint, 2 pints make 1 quart, 4 quarts make 1 gallon, $31\frac{1}{4}$ gallons make one barrel, 2 barrels make 1 hogshead.

TIME MEASURE.

60 seconds make 1 minute, 60 minutes make 1 hour, 24 hours make 1 day, 7 days make 1 week, 4 weeks make 1 lunar month, 28, 29, 30, or 31 days make 1 calendar month (30 days make 1 month in computing interest), 52 weeks and 1 day, or 12 calendar months, make 1 year, 365 days, 5 hours, 48 minutes and 49 seconds make 1 solar year.

CIRCULAR MEASURE.

60 seconds make 1 minute, 60 minutes make 1 degree, 30 degree make 1 sign, 90 degrees make 1 quadrant, 4 quadrants or 360 degrees make 1 circle.

LONG MEASURE—DISTANCE.

3 barleycorns 1 inch, 12 inches 1 foot, 3 feet 1 yard, $5\frac{1}{2}$ yards 1 rod, 40 rods 1 furlong, 8 furlongs one mile.

CLOTH MEASURE.

$2\frac{1}{2}$ inches 1 nail, 4 nails 1 quarter, 4 quarters 1 yard.

MISCELLANEOUS.

3 inches 1 palm, 4 inches 1 hand, 6 inches 1 span, 18 inches 1 cubit, 21.6 inches 1 Bible cubit, $2\frac{1}{4}$ feet 1 military pace.

SQUARE MEASURE.

144 square inches 1 square foot, 9 square feet 1 square yard, $30\frac{1}{4}$ square yards 1 square rod, 40 square rods 1 rood, 4 roods 1 acre, or 160 square rods one acre.

SURVEYOR'S MEASURE.

7.92 inches 1 link, 25 links 1 rod, 4 rods 1 chain, 10 square chains or 160 square rods, 1 acre, 640 acres one square mile.

CUBIC MEASURE.

1728 cubic inches 1 cubic foot, 27 cubic feet 1 cubic yard, 128 cubic feet 1 cord (wood), 40 cubic feet 1 ton (shipping), 2150.42 cubic inches 1 standard bushel, 231 cubic inches 1 standard gallon, 1 cubic foot four-fifths of a bushel.

MISCELLANEOUS TABLE.

12 things make	1 dozen.
12 dozen make	1 gross.
12 gross make	1 great gross.
20 things make	1 score.
196 pounds of flour make	1 barrel.
200 pounds of beef or pork make	1 barrel.
135 pounds of potatoes or apples make	1 barrel.
280 pounds of salt make	1 barrel.
400 pounds of molasses make	1 barrel.
200 pounds of sugar make	1 barrel.
240 pounds of lime make	1 barrel.
100 pounds of fish make	1 quintal
100 pounds of nails make	1 keg.
50 pounds of soap make	1 box.
20 pounds of raisins make	1 box.
2 pounds of cigars make	1 box.
20 pounds of soda make	1 box.
40 pounds of cheese make	1 box.
25 pounds of tobacco make	1 box.
62 pounds of tea make	1 box.
60 pounds of saleratus make	1 box.
25 pounds of chocolate make	1 box.
56 pounds of butter make	1 firkin.
5 pounds of spices make	1 can.
1100 pounds of rice make	1 tierce.
2150.42 cubic inches make	1 bushel.
231 cubic inches make	1 gallon.
14 pounds make	1 stone.
43560 feet make	1 acre.
100 square feet make	1 square.
5280 feet make	1 mile.
24½ cubic feet make	1 perch of stone.
128 cubic feet make	1 cord.
140 lbs. of lime make	1 cask.

A CUBIC FOOT OF

	Pounds.		Pounds
Common soil weighs	124	Clay or stone weighs	160
Strong " "	127	Cork	15
Loose earth or sand	95	Tallow	59
Clay	135	Bricks	125
Lead	708¾	Marble	171
Copper	555	Granite	165
Wrought iron	486¾	Oak wood	55
Anthracite coal	50-55	Red pine	42
Bituminous " "	45-55	White pine	30

THE METRIC SYSTEM.

WEIGHTS.

<i>Metric Denominations and Values.</i>		<i>Equivalents in Denominations in use.</i>	
NAMES.	No. Grams.	Weight of what quantity of water at maximum density.	Avoirdupois Weight.
Millier or tonneau	= 1,000,000	= 1 cubic meter	= 2204.6 pounds.
Quintal	= 100,000	= 1 hectoliter	= 220.46 pounds.
Myriagram	= 10,000	= 10 liters	= 22.046 pounds.
Kilogram or kilo	= 1,000	= 1 liter	= 2.2046 pounds.
Hectogram	= 100	= 1 deciliter	= 3.5274 ounces.
Dekagram	= 10	= 10 c. centimet.	= 0.3527 ounces.
Gram	= 1	= 1 c. centimet.	= 15.432 grains.
Decigram	= .1	= 1 c. centimet.	= 1.5432 grains.
Centigram	= .01	= 10 c. millimet.	= 0.1543 grain.
Milligram	= .001	= 1 c. millimet.	= 0.0154 grain.

MEASURES OF LENGTH.

<i>Metric Denominations and Values.</i>		<i>Equivalents in Denominations in use.</i>	
Myriameter	= 10,000 meters	= 6.2137 miles.	
Kilometer	= 1,000 meters	= 0.62137 m. or 3,280 feet 10 inches.	
Hectometer	= 100 meters	= 328 feet and 1 inch.	
Dekameter	= 10 meters	= 39.37 inches.	
Meter	= 1 meter	= 39.37 inches.	
Decimeter	= .1 of a meter	= 3.937 inches.	
Centimeter	= .01 of a meter	= 0.3937 inch.	
Millimeter	= .001 of a meter	= 0.0394 inch.	

MEASURES OF SURFACE.

<i>Metric Denominations and Values.</i>		<i>Equivalents in Denominations in use.</i>	
Hectare	= 10,000 square meters	= 2.471 acres.	
Are	= 100 square meters	= 119.6 square yards.	
Centare	= 1 square meter	= 1.550 square inches	

MEASURES OF CAPACITY.

<i>Metric Denominations and Values.</i>			<i>Equivalents in Denominations in use.</i>	
NAMES.	No. Liters.	Cubic Measure.	Dry Measure.	Wine Measure.
Kiloliter	= 1,000	= 1 cubic meter	= 1.308 cubic yards	= 264.17 galls.
Hectoliter	= 100	= .1 cubic meter	= 2 bush. 2.35 pks.	= 26.417 galls.
Decaliter	= 10	= 10 c. decimeters	= 9.08 quarts	= 2.6417 galls.
Liter	= 1	= 1 c. decimeter	= 0.908 quarts	= 1.0567 quarts.
Deciliter	= .1	= .1 c. decimeter	= 6.1022 cubic inch.	= 0.845 gills.
Centiliter	= .01	= 10 c. centimeters	= 0.6102 cubic inch.	= 0.338 fluid oz.
Milliliter	= .001	= 1 c. centimeter	= 0.061 cubic inch.	= 0.27 fluid dr.



"THE LABORER IS WORTHY OF HIS HIRE."

HOW TO USE THE WAGE TABLE.

EXAMPLE :

Find the amount due for 7 months, 19 days, at \$19 a mo

For 7 months,	-	-	-	\$133.
For 19 days,	-	-	-	13.88
Total amount,	-	-	-	\$146.88

Find the amount due for 1 year, 8 months and 3 days, at \$26 per month.

For 1 year, @ \$20 per month,	-	-	\$240.
" 1 " @ 6 (1/2 of \$12) per month,	-	-	72.
8 months. @ \$20 per month,	-	-	160.
3 " @ 6 (1/2 of \$12) per month	-	-	48.
" 3 days, @ \$20 per month,	-	-	2.31
" 3 " @ 6 (1/2 of \$12) per month,	-	-	.69
Total amount,	-	-	\$523.00

To get the wages for \$2.00 take it for \$ 1.00 and multiply by 2.

" " " " 4.00 " " 12.00 and divide by 3.	
" " " " 5.00 " " 10.00 " " 2.	
" " " " 6.00 " " 12.00 " " 2.	
" " " " 8.00 " " 16.00 " " 2.	
" " " " 9.00 " " 18.00 " " 2.	

MONTHLY WAGES TABLE.*

HOW TO CALCULATE THE WAGES OF HIRED HELP AT SIGHT.

DATE.	\$1	\$3	\$7	\$10	\$11	\$12	\$13	\$14	\$15	\$16	\$17	\$18	\$19	\$20
1	.04	.12	.27	.38	.42	.46	.50	.54	.58	.62	.65	.69	.73	.77
2	.08	.23	.54	.77	.85	.92	1.00	1.08	1.15	1.23	1.31	1.38	1.46	1.54
3	.12	.35	.81	1.15	1.27	1.38	1.50	1.62	1.73	1.85	1.96	2.08	2.19	2.31
4	.15	.46	1.08	1.54	1.69	1.85	2.00	2.15	2.31	2.46	2.62	2.77	2.92	3.08
5	.19	.58	1.35	1.92	2.12	2.31	2.50	2.69	2.88	3.08	3.27	3.46	3.65	3.85
6	.23	.69	1.62	2.31	2.54	2.77	3.00	3.23	3.46	3.69	3.92	4.15	4.38	4.62
7	.27	.81	1.88	2.69	2.96	3.23	3.50	3.77	4.04	4.31	4.58	4.85	5.12	5.38
8	.31	.92	2.15	3.08	3.38	3.69	4.00	4.31	4.62	4.92	5.23	5.54	5.85	6.15
9	.35	1.04	2.42	3.46	3.81	4.15	4.50	4.85	5.19	5.54	5.88	6.23	6.58	6.92
10	.38	1.15	2.69	3.85	4.23	4.62	5.00	5.38	5.77	6.15	6.54	6.92	7.31	7.69
11	.42	1.27	2.96	4.23	4.65	5.08	5.50	5.92	6.35	6.77	7.19	7.62	8.04	8.46
12	.46	1.38	3.23	4.62	5.08	5.44	6.00	6.46	6.92	7.38	7.85	8.31	8.77	9.23
13	.50	1.50	3.50	5.00	5.50	6.00	6.50	7.00	7.50	8.00	8.50	9.00	9.50	10.00
14	.54	1.62	3.77	5.38	5.92	6.46	7.00	7.54	8.08	8.62	9.15	9.69	10.23	10.77
15	.58	1.73	4.04	5.77	6.35	6.92	7.50	8.08	8.65	9.23	9.81	10.38	10.96	11.54
16	.62	1.85	4.31	6.15	6.77	7.38	8.00	8.62	9.23	9.85	10.46	11.08	11.69	12.31
17	.65	1.96	4.58	6.54	7.19	7.85	8.50	9.15	9.81	10.46	11.12	11.77	12.42	13.08
18	.69	2.08	4.85	6.92	7.62	8.31	9.00	9.69	10.38	11.08	11.77	12.46	13.15	13.85
19	.73	2.19	5.12	7.31	8.04	8.77	9.50	10.23	10.96	11.69	12.42	13.15	13.88	14.62
20	.77	2.31	5.38	7.69	8.46	9.23	10.00	10.77	11.54	12.31	13.08	13.85	14.62	15.38
21	.81	2.42	5.65	8.08	8.88	9.69	10.50	11.31	12.12	12.92	13.73	14.54	15.35	16.15
22	.85	2.54	5.92	8.46	9.31	10.15	11.00	11.85	12.69	13.54	14.38	15.23	16.08	16.92
23	.88	2.65	6.19	8.85	9.73	10.62	11.50	12.38	13.27	14.15	15.04	15.92	16.81	17.69
24	.92	2.77	6.46	9.23	10.15	11.08	12.00	12.92	13.85	14.77	15.69	16.62	17.54	18.46
25	.96	2.88	6.73	9.62	10.58	11.54	12.50	13.46	14.42	15.38	16.35	17.31	18.27	19.23
1mo	1.00	3.00	7.00	10.00	11.00	12.00	13.00	14.00	15.00	16.00	17.00	18.00	19.00	20.00
2	2.00	6.00	14.00	20.00	22.00	24.00	26.00	28.00	30.00	32.00	34.00	36.00	38.00	40.00
3	3.00	9.00	21.00	30.00	33.00	36.00	39.00	42.00	45.00	48.00	51.00	54.00	57.00	60.00
4	4.00	12.00	28.00	40.00	44.00	48.00	52.00	56.00	60.00	64.00	68.00	72.00	76.00	80.00
5	5.00	15.00	35.00	50.00	55.00	60.00	65.00	70.00	75.00	80.00	85.00	90.00	95.00	100.00
6	6.00	18.00	42.00	60.00	66.00	72.00	78.00	84.00	90.00	96.00	102.00	108.00	114.00	120.00
7	7.00	21.00	49.00	70.00	77.00	84.00	91.00	98.00	105.00	112.00	119.00	126.00	133.00	140.00
8	8.00	24.00	56.00	80.00	88.00	96.00	104.00	112.00	120.00	128.00	136.00	144.00	152.00	160.00
9	9.00	27.00	63.00	90.00	99.00	108.00	117.00	126.00	135.00	144.00	153.00	162.00	171.00	180.00
10	10.00	30.00	70.00	100.00	110.00	120.00	130.00	140.40	150.00	160.00	170.00	180.00	190.00	200.00
11	11.00	33.00	77.00	110.00	121.00	132.00	143.00	154.00	165.00	176.00	187.00	198.00	209.00	220.00
1 yr	12.00	36.00	84.00	120.00	132.00	144.00	156.00	168.00	180.00	192.00	204.00	216.00	228.00	240.00

* 26 working days in a month.

	\$19	\$20
$\frac{1}{2}$ hr.	.73	.77
1 hr.	1.46	1.54
2 hrs.	2.92	3.08
3 hrs.	4.38	4.62
4 hrs.	5.85	6.15
5 hrs.	7.31	7.69
6 hrs.	8.77	9.23
7 hrs.	10.23	10.77
8 hrs.	11.69	12.31
9 hrs.	13.15	13.85
10 hrs.	14.62	15.38
11 hrs.	16.08	16.92
12 hrs.	17.54	18.46
13 hrs.	19.00	20.00
14 hrs.	20.46	21.54
15 hrs.	21.92	23.08
16 hrs.	23.38	24.62
17 hrs.	24.85	26.15
18 hrs.	26.31	27.69
19 hrs.	27.77	29.23
20 hrs.	29.23	30.77
21 hrs.	30.69	32.31
22 hrs.	32.15	33.85
23 hrs.	33.61	35.38
24 hrs.	35.07	36.92
25 hrs.	36.53	38.46
26 hrs.	38.00	40.00
27 hrs.	39.46	41.54
28 hrs.	40.92	43.08
29 hrs.	42.38	44.62
30 hrs.	43.85	46.15
31 hrs.	45.31	47.69
32 hrs.	46.77	49.23
33 hrs.	48.23	50.77
34 hrs.	49.69	52.31
35 hrs.	51.15	53.85
36 hrs.	52.61	55.38
37 hrs.	54.07	56.92
38 hrs.	55.53	58.46
39 hrs.	57.00	60.00
40 hrs.	58.46	61.54
41 hrs.	59.92	63.08
42 hrs.	61.38	64.62
43 hrs.	62.85	66.15
44 hrs.	64.31	67.69
45 hrs.	65.77	69.23
46 hrs.	67.23	70.77
47 hrs.	68.69	72.31
48 hrs.	70.15	73.85
49 hrs.	71.61	75.38
50 hrs.	73.07	76.92
51 hrs.	74.53	78.46
52 hrs.	76.00	80.00
53 hrs.	77.46	81.54
54 hrs.	78.92	83.08
55 hrs.	80.38	84.62
56 hrs.	81.85	86.15
57 hrs.	83.31	87.69
58 hrs.	84.77	89.23
59 hrs.	86.23	90.77
60 hrs.	87.69	92.31
61 hrs.	89.15	93.85
62 hrs.	90.61	95.38
63 hrs.	92.07	96.92
64 hrs.	93.53	98.46
65 hrs.	95.00	100.00
66 hrs.	96.46	101.54
67 hrs.	97.92	103.08
68 hrs.	99.38	104.62
69 hrs.	100.85	106.15
70 hrs.	102.31	107.69
71 hrs.	103.77	109.23
72 hrs.	105.23	110.77
73 hrs.	106.69	112.31
74 hrs.	108.15	113.85
75 hrs.	109.61	115.38
76 hrs.	111.07	116.92
77 hrs.	112.53	118.46
78 hrs.	114.00	120.00
79 hrs.	115.46	121.54
80 hrs.	116.92	123.08
81 hrs.	118.38	124.62
82 hrs.	119.85	126.15
83 hrs.	121.31	127.69
84 hrs.	122.77	129.23
85 hrs.	124.23	130.77
86 hrs.	125.69	132.31
87 hrs.	127.15	133.85
88 hrs.	128.61	135.38
89 hrs.	130.07	136.92
90 hrs.	131.53	138.46
91 hrs.	133.00	140.00
92 hrs.	134.46	141.54
93 hrs.	135.92	143.08
94 hrs.	137.38	144.62
95 hrs.	138.85	146.15
96 hrs.	140.31	147.69
97 hrs.	141.77	149.23
98 hrs.	143.23	150.77
99 hrs.	144.69	152.31
100 hrs.	146.15	153.85

TABLE OF WAGES BY THE WEEK, GIVING THE DAY AND HOUR.

	\$1	\$2	\$3	\$4	\$5	\$6	\$7	\$8	\$9	\$10	\$11	\$12	\$13	\$14	\$15	\$16	\$17	\$18
$\frac{1}{2}$ hr.																		
1 hr.	1 $\frac{1}{2}$	3 $\frac{1}{2}$	5	6 $\frac{1}{2}$	8 $\frac{1}{2}$	10	11 $\frac{1}{2}$	13 $\frac{1}{2}$	15	16 $\frac{1}{2}$	18 $\frac{1}{2}$	20	21 $\frac{1}{2}$	23 $\frac{1}{2}$	25	26 $\frac{1}{2}$	28 $\frac{1}{2}$	30
2 hrs.	3 $\frac{1}{2}$	6 $\frac{1}{2}$	10	13 $\frac{1}{2}$	17 $\frac{1}{2}$	20	23 $\frac{1}{2}$	26 $\frac{1}{2}$	30	33 $\frac{1}{2}$	36 $\frac{1}{2}$	40	43 $\frac{1}{2}$	46 $\frac{1}{2}$	50	53 $\frac{1}{2}$	56 $\frac{1}{2}$	60
3 hrs.	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90
4 hrs.	6 $\frac{1}{2}$	13 $\frac{1}{2}$	20	26 $\frac{1}{2}$	33 $\frac{1}{2}$	40	46 $\frac{1}{2}$	53 $\frac{1}{2}$	60	66 $\frac{1}{2}$	73 $\frac{1}{2}$	80	86 $\frac{1}{2}$	93 $\frac{1}{2}$	1.00	1.06 $\frac{1}{2}$	1.13 $\frac{1}{2}$	1.20
5 hrs.	8 $\frac{1}{2}$	16 $\frac{1}{2}$	25	33 $\frac{1}{2}$	41 $\frac{1}{2}$	50	58 $\frac{1}{2}$	66 $\frac{1}{2}$	75	83 $\frac{1}{2}$	91 $\frac{1}{2}$	1.00	1.08 $\frac{1}{2}$	1.16 $\frac{1}{2}$	1.25	1.33 $\frac{1}{2}$	1.41 $\frac{1}{2}$	1.50
6 hrs.	10	20	30	40	50	60	70	80	90	1.00	1.10	1.20	1.30	1.40	1.50	1.60	1.70	1.80
7 hrs.	11 $\frac{1}{2}$	23 $\frac{1}{2}$	35	46 $\frac{1}{2}$	58 $\frac{1}{2}$	70	81 $\frac{1}{2}$	93 $\frac{1}{2}$	1.05	1.16 $\frac{1}{2}$	1.28 $\frac{1}{2}$	1.40	1.51 $\frac{1}{2}$	1.63 $\frac{1}{2}$	1.75	1.86 $\frac{1}{2}$	1.98 $\frac{1}{2}$	2.10
8 hrs.	13 $\frac{1}{2}$	26 $\frac{1}{2}$	40	53 $\frac{1}{2}$	66 $\frac{1}{2}$	80	93 $\frac{1}{2}$	1.06 $\frac{1}{2}$	1.20	1.33 $\frac{1}{2}$	1.46 $\frac{1}{2}$	1.60	1.73 $\frac{1}{2}$	1.86 $\frac{1}{2}$	2.00	2.13 $\frac{1}{2}$	2.26 $\frac{1}{2}$	2.40
9 hrs.	15	30	45	60	75	90	1.05	1.20	1.35	1.50	1.65	1.80	1.95	2.10	2.25	2.40	2.55	2.70
1 day	16 $\frac{1}{2}$	33 $\frac{1}{2}$	50	66 $\frac{1}{2}$	83 $\frac{1}{2}$	1.00	1.16 $\frac{1}{2}$	1.33 $\frac{1}{2}$	1.50	1.66 $\frac{1}{2}$	1.83 $\frac{1}{2}$	2.00	2.16 $\frac{1}{2}$	2.33 $\frac{1}{2}$	2.50	2.66 $\frac{1}{2}$	2.83 $\frac{1}{2}$	3.00
2 ds.	33 $\frac{1}{2}$	66 $\frac{1}{2}$	1.00	1.33 $\frac{1}{2}$	1.66 $\frac{1}{2}$	2.00	2.33 $\frac{1}{2}$	2.66 $\frac{1}{2}$	3.00	3.33 $\frac{1}{2}$	3.66 $\frac{1}{2}$	4.00	4.33 $\frac{1}{2}$	4.66 $\frac{1}{2}$	5.00	5.33 $\frac{1}{2}$	5.66 $\frac{1}{2}$	6.00
3 ds.	50	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50	5.00	5.50	6.00	6.50	7.00	7.50	8.00	8.50	9.00
4 ds.	66 $\frac{1}{2}$	1.33 $\frac{1}{2}$	2.00	2.66 $\frac{1}{2}$	3.33 $\frac{1}{2}$	4.00	4.66 $\frac{1}{2}$	5.33 $\frac{1}{2}$	6.00	6.66 $\frac{1}{2}$	7.33 $\frac{1}{2}$	8.00	8.66 $\frac{1}{2}$	9.33 $\frac{1}{2}$	10.00	10.66 $\frac{1}{2}$	11.33 $\frac{1}{2}$	12.00
5 ds.	83 $\frac{1}{2}$	1.66 $\frac{1}{2}$	2.50	3.33 $\frac{1}{2}$	4.16 $\frac{1}{2}$	5.00	5.83 $\frac{1}{2}$	6.66 $\frac{1}{2}$	7.50	8.33 $\frac{1}{2}$	9.16 $\frac{1}{2}$	10.00	10.83 $\frac{1}{2}$	11.66 $\frac{1}{2}$	12.50	13.33 $\frac{1}{2}$	14.16 $\frac{1}{2}$	15.00
6 ds.	1.00	2.00	3.00	4.00	5.00	6.00	7.00	8.00	9.00	10.00	11.00	12.00	13.00	14.00	15.00	16.00	17.00	18.00

The above table is based on 10 hours a day.

EXAMPLE: What will 4 days and 7 hours come to at \$9.00 per week? Ans.: \$7.05.

A READY RECKONER.

HOW TO FIND THE PRICE OF ANY NUMBER OF POUNDS, YARDS, PIECE
OR BUSHELS.

The first column gives the NUMBER, the top columns the PRICES.

NOS.	2 c.	3 c.	4 c.	5 c.	6 c.	7 c.	8 c.	9 c.	10 c.	11 c.	12 c.	12½ c.	13 c.	14 c.
2	.4	.6	.8	.10	.12	.14	.16	.18	.20	.22	.24	.25	.26	.28
3	.6	.9	.12	.15	.18	.21	.24	.27	.30	.33	.36	87½	.39	.42
4	.8	.12	.16	.20	.24	.28	.32	.36	.40	.44	.48	.50	.52	.56
5	1.0	.15	.20	.25	.30	.35	.40	.45	.50	.55	.60	.62½	.65	.70
6	1.2	.18	.24	.30	.36	.42	.48	.54	.60	.66	.72	.75	.78	.84
7	1.4	.21	.28	.35	.42	.49	.56	.63	.70	.77	.84	.87½	.91	.98
8	1.6	.24	.32	.40	.48	.56	.64	.72	.80	.88	.96	1.00	1.04	1.12
9	1.8	.27	.36	.45	.54	.63	.72	.81	.90	.99	1.08	1.12½	1.17	1.26
10	2.0	.30	.40	.50	.60	.70	.80	.90	1.00	1.10	1.20	1.25	1.30	1.40
11	2.2	.33	.44	.55	.66	.77	.88	.99	1.10	1.21	1.32	1.37½	1.43	1.54
12	2.4	.36	.48	.60	.72	.84	.96	1.08	1.20	1.32	1.44	1.50	1.56	1.68
13	2.6	.39	.52	.65	.78	.91	1.04	1.17	1.30	1.43	1.56	1.62½	1.69	1.82
14	2.8	.42	.56	.70	.84	.98	1.12	1.26	1.40	1.54	1.68	1.75	1.82	1.96
15	3.0	.45	.60	.75	.90	1.05	1.20	1.35	1.50	1.65	1.80	1.87½	1.95	2.10
16	3.2	.48	.64	.80	.96	1.12	1.28	1.44	1.60	1.76	1.92	2.00	2.08	2.24
17	3.4	.51	.68	.85	1.02	1.19	1.36	1.53	1.70	1.87	2.04	2.12½	2.21	2.38
18	3.6	.54	.72	.90	1.08	1.26	1.44	1.62	1.80	1.98	2.16	2.25	2.34	2.52
19	3.8	.57	.76	.95	1.14	1.33	1.52	1.71	1.90	2.09	2.28	2.37½	2.47	2.66
20	4.0	.60	.80	1.00	1.10	1.40	1.60	1.80	2.00	2.20	2.40	2.50	2.60	2.80
21	4.2	.63	.84	1.05	1.26	1.47	1.68	1.89	2.10	2.31	2.52	2.62½	2.73	2.94
22	4.4	.66	.88	1.10	1.32	1.54	1.76	1.98	2.20	2.42	2.64	2.75	2.86	3.08
23	4.6	.69	.92	1.15	1.38	1.61	1.84	2.07	2.30	2.53	2.76	2.87½	2.99	3.22
24	4.8	.72	.96	1.20	1.44	1.68	1.92	2.16	2.40	2.64	2.88	3.00	3.12	3.36
25	5.0	.75	1.00	1.25	1.50	1.75	2.00	2.25	2.50	2.75	3.00	3.12½	3.25	3.50
26	5.2	.78	1.04	1.30	1.56	1.82	2.08	2.34	2.60	2.86	3.12	3.25	3.38	3.64
27	5.4	.81	1.08	1.35	1.62	1.89	2.16	2.43	2.70	2.97	3.24	3.37½	3.51	3.78
28	5.6	.84	1.12	1.40	1.68	1.96	2.24	2.53	2.80	3.08	3.36	3.50	3.64	3.92
29	5.8	.87	1.16	1.45	1.74	2.03	2.32	2.61	2.90	3.19	3.48	3.62½	3.77	4.06
30	6.0	.90	1.20	1.50	1.80	2.10	2.40	2.70	3.00	3.30	3.60	3.75	3.90	4.20
31	6.2	.93	1.24	1.55	1.86	2.17	2.48	2.79	3.10	3.41	3.72	3.87½	4.03	4.34
32	6.4	.96	1.28	1.60	1.92	2.24	2.56	2.88	3.20	3.52	3.84	4.00	4.16	4.48
33	6.6	.99	1.32	1.65	1.98	2.31	2.64	2.97	3.30	3.63	3.96	4.12½	4.29	4.62
34	6.8	1.02	1.36	1.70	2.04	2.38	2.72	3.06	3.40	3.74	4.08	4.25	4.42	4.76
35	7.0	1.05	1.40	1.75	2.10	2.45	2.80	3.15	3.50	3.85	4.20	4.37½	4.55	4.90
36	7.2	1.08	1.44	1.80	2.16	2.52	2.88	3.24	3.60	3.96	4.32	4.50	4.68	5.04
37	7.4	1.11	1.48	1.85	2.22	2.59	2.96	3.33	3.70	4.07	4.44	4.62½	4.81	5.18
38	7.6	1.14	1.52	1.90	2.28	2.66	3.04	3.42	3.80	4.18	4.56	4.75	4.94	5.32
39	7.8	1.17	1.56	1.95	2.34	2.73	3.12	3.51	3.90	4.29	4.68	4.87½	5.07	5.46
40	8.0	1.20	1.60	2.00	2.40	2.80	3.20	3.60	4.00	4.40	4.80	5.00	5.20	5.60
41	8.2	1.23	1.64	2.05	2.46	2.87	3.28	3.69	4.10	4.51	4.92	5.12½	5.33	5.74
42	8.4	1.26	1.68	2.10	2.52	2.94	3.36	3.78	4.20	4.62	5.04	5.25	5.46	5.88
43	8.6	1.29	1.72	2.15	2.58	3.01	3.44	3.87	4.30	4.73	5.16	5.37½	5.59	6.02
44	8.8	1.32	1.76	2.20	2.64	3.08	3.52	3.96	4.40	4.84	5.28	5.50	5.72	6.16
45	9.0	1.35	1.80	2.25	2.70	3.15	3.60	4.05	4.50	4.95	5.40	5.62½	5.85	6.30
46	9.2	1.38	1.84	2.30	2.76	3.22	3.68	4.14	4.60	5.06	5.52	5.75	5.98	6.44
47	9.4	1.41	1.88	2.35	2.82	3.29	3.76	4.23	4.70	5.17	5.64	5.87½	6.11	6.58
48	9.6	1.44	1.92	2.40	2.88	3.36	3.84	4.32	4.80	5.28	5.76	6.00	6.24	6.72
49	9.8	1.47	1.96	2.45	2.94	3.43	3.92	4.41	4.90	5.39	5.88	6.12½	6.37	6.86
50	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50	5.00	5.50	6.00	6.25	6.50	7.00
60	1.20	1.80	2.40	3.00	3.60	4.20	4.80	5.40	6.00	6.60	7.20	7.50	7.80	8.40
70	1.40	2.10	2.80	3.50	4.20	4.90	5.60	6.30	7.00	7.70	8.40	8.75	9.10	9.80
80	1.60	2.40	3.20	4.00	4.80	5.60	6.40	7.20	8.00	8.80	9.60	10.00	10.40	11.20
90	1.80	2.70	3.60	4.50	5.40	6.30	7.20	8.10	9.00	9.90	10.80	11.25	11.70	12.60
100	2.00	3.00	4.00	5.00	6.00	7.00	8.00	9.00	10.00	11.00	12.00	12.50	13.00	14.00

A READY RECKONER.

217

A READY RECKONER.

HOW TO FIND THE PRICE OF ANY NUMBER OF POUNDS, YARDS, PIECES
OR BUSHELS.

CONTINUED.

The first column gives the NUMBER, the top columns the PRICES.

NOS.	15 c.	16 c.	17 c.	18 c.	19 c.	20 c.	21 c.	22 c.	23 c.	24 c.	25 c.	26 c.	27 c.
2	.30	.32	.34	.36	.38	.40	.42	.44	.46	.48	.50	.52	.54
3	.45	.48	.51	.54	.57	.60	.63	.66	.69	.72	.75	.78	.81
4	.60	.64	.68	.72	.76	.80	.84	.88	.92	.96	1.00	1.04	1.08
5	.75	.80	.85	.90	.95	1.00	1.05	1.10	1.15	1.20	1.25	1.30	1.35
6	.90	.96	1.02	1.08	1.14	1.20	1.26	1.32	1.38	1.44	1.50	1.56	1.62
7	1.05	1.12	1.19	1.26	1.33	1.40	1.47	1.54	1.61	1.68	1.75	1.82	1.89
8	1.20	1.28	1.36	1.44	1.52	1.60	1.68	1.76	1.84	1.92	2.00	2.08	2.16
9	1.35	1.44	1.53	1.62	1.71	1.80	1.89	1.98	2.07	2.16	2.25	2.34	2.43
10	1.50	1.60	1.70	1.80	1.90	2.00	2.10	2.20	2.30	2.40	2.50	2.60	2.70
11	1.65	1.76	1.87	1.98	2.09	2.20	2.31	2.42	2.53	2.64	2.75	2.86	2.97
12	1.80	1.92	2.04	2.16	2.28	2.40	2.52	2.64	2.76	2.88	3.00	3.12	3.24
13	1.95	2.08	2.21	2.34	2.47	2.60	2.73	2.86	2.99	3.12	3.25	3.38	3.51
14	2.10	2.24	2.38	2.52	2.66	2.80	2.94	3.08	3.22	3.36	3.50	3.64	3.78
15	2.25	2.40	2.55	2.70	2.85	3.00	3.15	3.30	3.45	3.60	3.75	3.90	4.05
16	2.40	2.56	2.72	2.88	3.04	3.20	3.36	3.52	3.68	3.84	4.00	4.16	4.32
17	2.55	2.72	2.89	3.06	3.23	3.40	3.57	3.74	3.91	4.08	4.25	4.42	4.59
18	2.70	2.88	3.06	3.24	3.42	3.60	3.78	3.96	4.14	4.32	4.50	4.68	4.86
19	2.85	3.04	3.23	3.42	3.61	3.80	3.99	4.18	4.37	4.56	4.75	4.94	5.13
20	3.00	3.20	3.40	3.60	3.80	4.00	4.20	4.40	4.60	4.80	5.00	5.20	5.40
21	3.15	3.36	3.57	3.78	3.99	4.20	4.41	4.62	4.83	5.04	5.25	5.46	5.67
22	3.30	3.52	3.74	3.96	4.18	4.40	4.62	4.84	5.06	5.28	5.50	5.72	5.94
23	3.45	3.68	3.91	4.14	4.37	4.60	4.83	5.06	5.29	5.52	5.75	5.98	6.21
24	3.60	3.84	4.08	4.32	4.56	4.80	5.04	5.28	5.52	5.76	6.00	6.24	6.48
25	3.75	4.00	4.25	4.50	4.75	5.00	5.25	5.50	5.75	6.00	6.25	6.50	6.75
26	3.90	4.16	4.42	4.68	4.94	5.20	5.46	5.72	5.98	6.24	6.50	6.76	7.02
27	4.05	4.32	4.59	4.86	5.13	5.40	5.67	5.94	6.21	6.48	6.75	7.02	7.29
28	4.20	4.48	4.76	5.04	5.32	5.60	5.88	6.16	6.44	6.72	7.00	7.28	7.56
29	4.35	4.64	4.93	5.22	5.51	5.80	6.09	6.38	6.67	6.96	7.25	7.54	7.83
30	4.50	4.80	5.10	5.40	5.70	6.00	6.30	6.60	6.90	7.20	7.50	7.80	8.10
31	4.65	4.96	5.27	5.58	5.89	6.20	6.51	6.82	7.13	7.44	7.75	8.06	8.37
32	4.80	5.12	5.44	5.76	6.08	6.40	6.72	7.04	7.36	7.68	8.00	8.32	8.64
33	4.95	5.28	5.61	5.94	6.27	6.60	6.93	7.26	7.59	7.92	8.25	8.58	8.91
34	5.10	5.44	5.78	6.12	6.46	6.80	7.14	7.48	7.82	8.16	8.50	8.84	9.18
35	5.25	5.60	5.95	6.30	6.65	7.00	7.35	7.70	8.05	8.40	8.75	9.10	9.45
36	5.40	5.76	6.12	6.48	6.84	7.20	7.56	7.92	8.28	8.64	9.00	9.36	9.72
37	5.55	5.92	6.29	6.66	7.03	7.40	7.77	8.14	8.51	8.88	9.25	9.62	9.99
38	5.70	6.08	6.46	6.84	7.22	7.60	7.98	8.36	8.74	9.12	9.50	9.88	10.26
39	5.85	6.24	6.63	7.02	7.41	7.80	8.19	8.58	8.97	9.36	9.75	10.14	10.53
40	6.00	6.40	6.80	7.20	7.60	8.00	8.40	8.80	9.20	9.60	10.00	10.40	10.80
41	6.15	6.56	6.97	7.38	7.79	8.20	8.61	9.02	9.43	9.84	10.25	10.66	11.07
42	6.30	6.72	7.14	7.56	7.98	8.40	8.82	9.24	9.66	10.08	10.50	10.92	11.34
43	6.45	6.88	7.31	7.74	8.17	8.60	9.03	9.46	9.89	10.32	10.75	11.18	11.61
44	6.60	7.04	7.48	7.92	8.36	8.80	9.24	9.68	10.12	10.56	11.00	11.44	11.88
45	6.75	7.20	7.65	8.10	8.55	9.00	9.45	9.90	10.35	10.80	11.25	11.70	12.15
46	6.90	7.36	7.82	8.28	8.74	9.20	9.66	10.12	10.58	11.04	11.50	11.96	12.42
47	7.05	7.52	7.99	8.46	8.93	9.40	9.87	10.34	10.81	11.28	11.75	12.22	12.69
48	7.20	7.68	8.16	8.64	9.12	9.60	10.08	10.56	11.04	11.52	12.00	12.48	12.96
49	7.35	7.84	8.32	8.82	9.31	9.80	10.29	10.78	11.27	11.76	12.25	12.74	13.23
50	7.50	8.00	8.50	9.00	9.50	10.00	10.50	11.00	11.50	12.00	12.50	13.00	13.50
60	9.00	9.60	10.20	10.80	11.40	12.00	12.60	13.20	13.80	14.40	15.00	15.60	16.20
70	10.50	11.20	11.90	12.60	13.30	14.00	14.70	15.40	16.10	16.80	17.50	18.20	18.90
80	12.00	12.80	13.60	14.40	15.20	16.00	16.80	17.60	18.40	19.20	20.00	20.80	21.60
90	13.50	14.40	15.30	16.20	17.10	18.00	18.90	19.80	20.70	21.60	22.50	23.40	24.30
100	15.00	16.00	17.00	18.00	19.00	20.00	21.00	22.00	23.00	24.00	25.00	26.00	27.00

A READY RECKONER.

HOW TO FIND THE PRICE OF ANY NUMBER OF POUNDS, YARDS, PIECES
OR BUSHELS.

CONTINUED.

The first column gives the NUMBER, the top columns the PRICES.

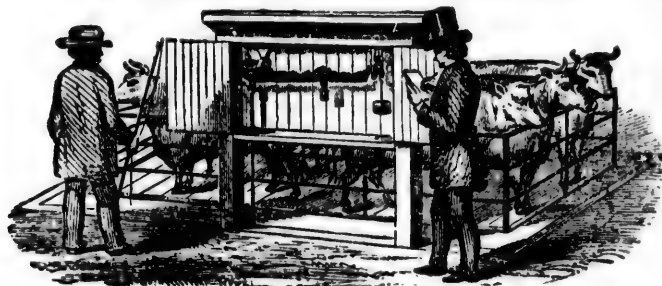
NOS.	28 c.	29 c.	30 c.	31 c.	32 c.	33 c.	34 c.	35 c.	36 c.	37 c.	38 c.	39 c.	40 c.
2	.58	.58	.6	.62	.64	.66	.68	.70	.72	.74	.76	.78	.80
3	.84	.87	.90	.93	.96	.99	1.02	1.05	1.08	1.11	1.14	1.17	1.20
4	1.12	1.16	1.20	1.24	1.28	1.32	1.36	1.40	1.44	1.48	1.52	1.56	1.60
5	1.40	1.45	1.50	1.56	1.60	1.65	1.70	1.75	1.80	1.85	1.90	1.95	2.00
6	1.63	1.74	1.80	1.86	1.92	1.98	2.04	2.10	2.16	2.22	2.28	2.34	2.40
7	1.93	2.04	2.10	2.17	2.24	2.31	2.38	2.45	2.52	2.59	2.66	2.73	2.80
8	2.24	2.32	2.40	2.48	2.56	2.64	2.72	2.80	2.88	2.96	3.04	3.12	3.20
9	2.52	2.61	2.70	2.79	2.88	2.97	3.06	3.15	3.24	3.33	3.42	3.51	3.60
10	2.80	2.90	3.00	3.10	3.20	3.30	3.40	3.50	3.60	3.70	3.80	3.90	4.00
11	3.03	3.19	3.30	3.41	3.52	3.63	3.74	3.85	3.96	4.07	4.18	4.29	4.40
12	3.36	3.48	3.63	3.72	3.84	3.96	4.08	4.20	4.32	4.44	4.56	4.68	4.80
13	3.64	3.77	3.90	4.03	4.16	4.29	4.42	4.55	4.68	4.81	4.94	5.07	5.20
14	3.92	4.03	4.20	4.34	4.48	4.62	4.76	4.90	5.04	5.18	5.32	5.46	5.60
15	4.20	4.33	4.50	4.65	4.80	4.95	5.10	5.25	5.40	5.55	5.70	5.85	6.00
16	4.48	4.61	4.80	4.96	5.12	5.28	5.44	5.60	5.76	5.92	6.08	6.24	6.40
17	4.76	4.91	5.10	5.27	5.44	5.61	5.77	5.95	6.12	6.29	6.46	6.63	6.80
18	5.04	5.22	5.40	5.58	5.76	5.94	6.12	6.30	6.48	6.66	6.84	7.02	7.20
19	5.32	5.51	5.70	5.89	6.08	6.27	6.46	6.65	6.84	7.03	7.22	7.41	7.60
20	5.60	5.81	6.00	6.20	6.40	6.60	6.80	7.00	7.20	7.40	7.60	7.80	8.00
21	5.88	6.09	6.30	6.51	6.72	6.93	7.14	7.35	7.56	7.77	7.98	8.19	8.40
22	6.16	6.38	6.60	6.82	7.04	7.26	7.48	7.70	7.92	8.14	8.36	8.58	8.80
23	6.44	6.67	6.90	7.13	7.36	7.59	7.82	8.05	8.28	8.51	8.74	8.97	9.20
24	6.72	6.96	7.20	7.44	7.68	7.92	8.16	8.40	8.64	8.88	9.12	9.36	9.60
25	7.00	7.25	7.50	7.72	8.00	8.25	8.50	8.75	9.00	9.25	9.50	9.75	10.00
26	7.28	7.54	7.80	8.06	8.32	8.58	8.84	9.10	9.36	9.62	9.88	10.14	10.40
27	7.56	7.83	8.10	8.37	8.64	8.91	9.18	9.45	9.72	9.99	10.26	10.53	10.80
28	7.84	8.12	8.40	8.68	8.96	9.24	9.52	9.80	10.08	10.36	10.64	10.92	11.20
29	8.12	8.41	8.70	8.99	9.24	9.57	9.86	10.15	10.44	10.73	11.02	11.31	11.60
30	8.40	8.70	9.00	9.30	9.60	9.90	10.20	10.50	10.80	11.10	11.40	11.70	12.00
31	8.68	8.99	9.30	9.61	9.92	10.23	10.54	10.85	11.16	11.47	11.78	12.09	12.40
32	8.96	9.28	9.60	9.92	10.24	10.56	10.88	11.20	11.52	11.84	12.16	12.48	12.80
33	9.24	9.57	9.90	10.23	10.56	10.89	11.22	11.55	11.88	12.21	12.54	12.87	13.20
34	9.52	9.86	10.20	10.54	10.88	11.22	11.56	11.90	12.24	12.58	12.92	13.26	13.60
35	9.80	10.15	10.50	10.85	11.20	11.55	11.90	12.25	12.60	12.95	13.30	13.65	14.00
36	10.08	10.44	10.80	11.16	11.52	11.88	12.24	12.60	12.96	13.32	13.68	14.04	14.40
37	10.36	10.73	11.10	11.47	11.84	12.21	12.58	12.95	13.32	13.69	14.06	14.43	14.80
38	10.64	11.02	11.40	11.78	12.16	12.54	12.92	13.30	13.68	14.06	14.44	14.82	15.20
39	10.92	11.31	11.70	12.09	12.48	12.87	13.26	13.65	14.04	14.43	14.82	15.21	15.60
40	11.20	11.60	12.00	12.40	12.80	13.20	13.60	14.00	14.40	14.80	15.20	15.60	16.00
41	11.48	11.89	12.30	12.71	13.12	13.53	13.94	14.35	14.76	15.17	15.58	15.99	16.40
42	11.76	12.18	12.60	13.02	13.44	13.86	14.28	14.70	15.12	15.54	15.96	16.38	16.80
43	12.04	12.47	12.90	13.33	13.76	14.19	14.62	15.05	15.48	15.91	16.34	16.77	17.20
44	12.32	12.76	13.2	13.61	14.08	14.52	14.96	15.40	15.84	16.28	16.72	17.16	17.60
45	12.60	13.05	13.50	13.95	14.40	14.85	15.30	15.75	16.20	16.65	17.10	17.55	18.00
46	12.88	13.34	13.80	14.26	14.72	15.18	15.64	16.10	16.56	17.02	17.48	17.94	18.40
47	13.16	13.63	14.10	14.57	15.04	15.51	15.98	16.45	16.92	17.39	17.86	18.33	18.80
48	13.44	13.92	14.40	14.88	15.36	15.84	16.32	16.80	17.28	17.76	18.24	18.72	19.20
49	13.72	14.21	14.70	15.19	15.68	16.17	16.66	17.15	17.64	18.13	18.62	19.11	19.60
50	14.00	14.50	15.00	15.50	16.00	16.50	17.00	17.50	18.00	18.50	19.00	19.50	20.00
60	16.80	17.40	18.00	18.60	19.20	19.80	20.40	21.00	21.60	22.20	22.80	23.40	24.00
70	19.60	20.30	21.00	21.70	22.40	23.10	23.80	24.50	25.20	25.90	26.60	27.30	28.00
80	22.40	23.20	24.00	24.80	25.60	26.40	27.20	28.00	28.80	29.60	30.40	31.20	32.00
90	25.20	26.10	27.00	27.90	28.80	29.70	30.60	31.50	32.40	33.30	34.20	35.10	36.00
100	28.00	29.00	30.00	31.00	32.00	33.00	34.00	35.00	36.00	37.00	38.00	39.00	40.00

PIECES

ES.

0 c. 10 c.

.78	.80
1.17	1.20
1.56	1.60
1.95	2.00
2.34	2.40
2.73	2.80
3.12	3.20
3.51	3.60
3.90	4.00
4.29	4.40
4.68	4.80
5.07	5.20
5.46	5.60
5.85	6.00
6.24	6.40
6.63	6.80
7.02	7.20
7.41	7.60
7.80	8.00
8.19	8.40
8.58	8.80
8.97	9.20
9.36	9.60
9.75	10.00
10.14	10.40
10.53	10.80
10.92	11.20
11.31	11.60
11.70	12.00
12.09	12.40
12.48	12.80
12.87	13.20
13.26	13.60
13.65	14.00
14.04	14.40
14.43	14.80
14.82	15.20
15.21	15.60
15.60	16.00
15.99	16.40
16.38	16.80
16.77	17.20
17.16	17.60
17.55	18.00
17.94	18.40
18.33	18.80
18.72	19.20
19.11	19.60
19.50	20.00
19.89	20.40
20.28	20.80
20.67	21.20
21.06	21.60
21.45	22.00
21.84	22.40
22.23	22.80
22.62	23.20
23.01	23.60
23.40	24.00
23.79	24.40
24.18	24.80
24.57	25.20
24.96	25.60
25.35	26.00
25.74	26.40
26.13	26.80
26.52	27.20
26.91	27.60
27.30	28.00
27.69	28.40
28.08	28.80
28.47	29.20
28.86	29.60
29.25	30.00
29.64	30.40
30.03	30.80
30.42	31.20
30.81	31.60
31.20	32.00
31.59	32.40
31.98	32.80
32.37	33.20
32.76	33.60
33.15	34.00
33.54	34.40
33.93	34.80
34.32	35.20
34.71	35.60
35.10	36.00
35.49	36.40
35.88	36.80
36.27	37.20
36.66	37.60
37.05	38.00
37.44	38.40
37.83	38.80
38.22	39.20
38.61	39.60
39.00	40.00



RAPID METHODS IN BUSINESS CALCULATIONS.

To Multiply any Two Numbers together, each having the same Fractions.

- Rule.*—1. Multiply the whole numbers together.
 2. Add the two numbers together and multiply this sum by either one of the fractions.
 3. Multiply the two fractions together.
 4. Add the results together.

EXAMPLE.

$$\begin{array}{r} 12\frac{3}{4} \\ 8\frac{1}{4} \\ \hline 96 \\ 15 \\ \hline 111\frac{9}{16} \text{ Ans.} \end{array}$$

How to Multiply any Mixed Numbers.

- Rule.*—1. Multiply the whole numbers together.
 2. Multiply the upper whole number by the lower fraction.
 3. Multiply the lower whole number by the upper fraction.
 4. Multiply the fractions together.
 5. Add the four products together.

EXAMPLE.—MULTIPLY $16\frac{2}{3}$ BY $9\frac{3}{4}$.

$$\begin{array}{r} 16\frac{2}{3} \\ 9\frac{3}{4} \\ \hline 144 \\ 12 \\ 6 \\ \hline 162\frac{1}{2} \text{ Ans.} \end{array}$$

N. B.—The examples should be worked by not writing out the middle parts, but add the amounts mentally.

Business Methods for Multiplying all kinds of Mixed Numbers.

Rule.—Multiply the whole numbers together, then multiply each whole number by the fraction in the other number to its nearest unit and add the products.

NOTE.—In business it is the custom to reject fractions less than $\frac{1}{2}$ in each sum and count one for each fraction over $\frac{1}{2}$.

How much will $34\frac{3}{4}$ yards of cloth cost at $22\frac{1}{2}$ cents per yard?

Solution, $34 \times 22 = \$7.48$

$34 \times \frac{3}{4} = .17$

Nearest unit, $22 \times \frac{1}{2} = .16$ (We omit the fraction and call it 16.)

$\frac{3}{4} \times \frac{1}{2} = \frac{3}{8}$

$\$7.81\frac{3}{8}$ Ans.

What is the cost of 17 dozen and 9 eggs at $12\frac{1}{2}$ cents per dozen?

Solution, $17 \times 12 = \$2.04$

$17 \times \frac{1}{2} = 9$ (Make the $\frac{1}{2}$ a unit.)

9 eggs = $\frac{3}{4}$ dozen, $12 \times \frac{3}{4} = 9$

$\$2.22$ Ans.

N. B.—The last fraction in business is generally omitted.



A TILE FACTORY.

HOW TO FIND THE CARRYING CAPACITY OF TILE.

GALLONS PER MINUTE.

SIZE OF TILE.	FALL PER 100 FEET.						
	1 in.	3 in.	6 in.	9 in.	12 in.	24 in.	36 in.
3-inch	13	23	32	40	46	64	79
4-inch	27	47	66	81	93	131	163
6-inch	75	129	183	224	258	364	450
8-inch	153	265	375	460	529	750	923
9-inch	205	355	593	617	711	1006	1240
10-inch	267	463	655	803	926	1310	1613
12-inch	422	730	1033	1273	1468	2076	2551

A large tile will carry more water according to its size than a small one. This is because there is less surface on the inside of the large tile compared with the size of stream, and therefore less friction. More water will flow through a straight tile than a crooked one having the same diameter.

EXAMPLE: A nine-inch tile at 6 inches fall to the 100 feet will flow 593 gals. per minute.



CARRYING CAPACITY OF FREIGHT CARS.

ONE CAR-LOAD.

Salt.....	80 to 100 bbls.	Sheep.....	80 to 100 head
Lumber....	8,000 to 13,000 feet.	Hay.....	10 tons.
Barley.....	417 to 833 bush.	Coal.....	12 to 20 tons.
Wheat.....	333 to 666 bush.	Stone.....	2 cords.
Corn.....	357 to 714 bush.	Tile, 3-inch...	6,000 feet.
Potatoes.....	333 to 666 bush.	Tile, 4-inch...	4,000 feet.
Oats.....	625 to 1,250 bush.	Tile, 6-inch...	2,500 feet.
Rye.....	357 to 714 bush.	Tile, 10-inch...	1,200 feet.
Cattle.....	16 to 24 head.	Tile, 12-inch...	1,000 feet.
Hogs.....	40 to 60 head.	Gravel.....	7 cubic yards.

WIRE FENCE MATERIALS.

NUMBER OF STAPLES TO THE POUND.

$1\frac{1}{4}$ inch.....	100 to the pound.
$1\frac{1}{2}$ inch.....	85 to the pound.
$1\frac{3}{4}$ inch.....	72 to the pound.

NUMBER OF POUNDS BARB-WIRE TO THE ROD.

Common Glidden Barb-wire.....	$1\frac{1}{10}$ lbs. to the rod.
Double Thick Glidden Barb-wire.....	$1\frac{1}{8}$ lbs. to the rod.
Plain Fence Wire.....	1 lb. to the rod.

LE.

36 in.

79
163
450
923
1240
1613
2551

all one.
ompared
ill flow
flow 593



How to Estimate the Contents of a Pile of Grain, Potatoes, Hay or Wood.

Rule.—Put the commodity in the form of a heap. Then multiply the diameter in feet by itself, and then again by the height in feet, and divide the result by 4, and you have the approximate contents in bushels.

Example:—How many bushels in a heap of grain 6 feet in diameter and 3 feet high?

Solution:— $6 \times 6 \times 3 \div 4 = 27$ bushels. Ans.

How Many Nails to the Pound.

	No. to the lb.	Length in inches.
3 penny fine.....	700	1¼
3 penny common.....	480	1¼
4 penny common.....	300	1½
6 penny common.....	160	2
8 penny common.....	92	2½
10 penny common.....	60	3
16 penny common.....	32	3½
20 penny common.....	24	4
40 penny common.....	14	5
60 penny common.....	8	6
8 penny fence.....	50	2½
10 penny fence.....	34	3



How to Figure Up a Load of Grain.

Rule.—Find the total number of pounds and divide that by the number of pounds in one bushel and it will equal the number of bushels.

Example : How many bushels in 2840 pounds of wheat, and what will it cost at 90 cents per bushel ?

Solution : $2840 \div 60 = 47$ bushel and 20 pounds or $47\frac{2}{3}$ bushels.

$$47\frac{2}{3} \times 90 \text{ c.} = \$39.60. \text{ Ans.}$$

How to Use the Grain Table.

The heavy type column represents the weight of the load, and the number of bushels and pounds are at the right under the kind of grain. See example at the foot of next page.

atoes,

iply the
d divide

feet in

length in
inches.

$1\frac{1}{4}$
 $1\frac{1}{4}$
 $1\frac{1}{2}$
 2
 $2\frac{1}{2}$
 3
 $3\frac{1}{2}$
 4
 5
 6
 $2\frac{1}{2}$
 3

How to Find the Number of Bushels in a Load of Grain at Sight.

Wgt.	Oats. 34 lbs.		Corn, Rye. 56 lbs.		Barley. 48 lbs.		*Wheat. 60 lbs.		Wgt.	Oats. 34 lbs.		Corn, Rye. 56 lbs.		Barley. 48 lbs.		*Wheat. 60 lbs.	
	Bu.	Lbs.	Bu.	Lbs.	Bu.	Lbs.	Bu.	Lbs.		Bu.	Lbs.	Bu.	Lbs.	Bu.	Lbs.	Bu.	Lbs.
1800	44	04	26	44	31	12	25	00	2000	58	28	35	40	41	32	33	20
1810	44	14	26	54	31	22	25	10	2010	59	04	35	50	41	42	33	30
1820	44	24	27	08	31	32	25	20	2020	59	14	36	04	42	04	33	40
1830	45	00	27	18	31	42	25	30	2030	59	24	36	14	42	14	33	50
1840	45	10	27	28	32	01	25	40	2040	60	00	36	24	42	24	34	00
1850	45	20	27	38	32	11	25	50	2050	60	10	36	34	42	34	34	10
1860	45	30	27	48	32	21	25	00	2060	60	20	36	44	42	44	34	20
1870	46	06	28	02	32	31	26	10	2070	60	30	36	54	43	06	34	30
1880	46	16	28	12	32	41	26	20	2080	61	06	37	08	43	16	34	40
1890	46	26	28	22	33	06	26	30	2090	61	16	37	18	43	26	34	50
1900	47	02	28	32	33	16	26	40	2100	61	26	37	28	43	36	35	00
1910	47	12	28	42	33	26	26	50	2110	62	02	37	38	43	46	35	10
1920	47	22	28	52	33	36	27	00	2120	62	12	37	48	44	08	35	20
1930	47	32	29	06	33	46	27	10	2130	62	22	38	02	44	18	35	30
1940	48	08	29	16	34	08	27	20	2140	62	32	38	12	44	28	35	40
1950	48	18	29	26	34	18	27	30	2150	63	08	38	22	44	38	35	50
1960	48	28	29	36	34	28	27	40	2160	63	18	38	32	45	00	36	00
1970	49	04	29	46	34	38	27	50	2170	63	28	38	42	45	10	36	10
1980	49	14	30	00	35	00	28	00	2180	64	04	38	52	45	20	36	20
1990	49	24	30	10	35	10	28	10	2190	64	14	39	06	45	30	36	30
2000	50	00	30	20	35	20	28	20	2200	64	24	39	16	45	40	36	40
2010	50	10	30	30	35	30	28	30	2210	65	00	39	26	46	02	36	50
2020	50	20	30	40	35	40	28	40	2220	65	10	39	36	46	12	37	00
2030	50	30	30	50	36	02	28	50	2230	65	20	39	46	46	22	37	10
2040	51	06	31	04	36	12	29	00	2240	65	30	40	00	46	32	37	20
2050	51	16	31	14	36	22	29	10	2250	66	06	40	10	46	42	37	30
2060	51	26	31	24	36	32	29	20	2260	66	16	40	20	47	04	37	40
2070	52	02	31	34	36	42	29	30	2270	66	26	40	30	47	14	37	50
2080	52	12	31	44	37	04	29	40	2280	67	02	40	40	47	24	38	00
2090	52	22	31	54	37	14	29	50	2290	67	12	40	50	47	34	38	10
2100	52	32	32	08	37	24	30	00	2300	67	22	41	04	47	44	38	20
2110	53	08	32	18	37	34	30	10	2310	67	32	41	14	48	06	38	30
2120	53	18	32	28	37	44	30	20	2320	68	08	41	24	48	16	38	40
2130	53	28	32	38	38	06	30	30	2330	68	18	41	34	48	26	38	50
2140	54	04	32	48	38	16	30	40	2340	68	28	41	44	48	36	39	00
2150	54	14	33	02	38	26	30	50	2350	69	04	41	54	48	46	39	10
2160	54	24	33	12	38	36	31	00	2360	69	14	42	08	49	08	39	20
2170	55	00	33	22	38	46	31	10	2370	69	24	42	18	49	18	39	30
2180	55	10	33	32	39	08	31	20	2380	70	00	42	28	49	28	39	40
2190	55	20	33	42	39	18	31	30	2390	70	10	42	38	49	38	39	50
2200	55	30	33	52	39	28	31	40	2400	70	20	42	48	50	00	40	00
2210	56	06	34	06	39	38	31	50	2410	70	30	43	02	50	10	40	10
2220	56	16	34	16	40	00	32	00	2420	71	06	43	12	50	20	40	20
2230	56	26	34	26	40	10	32	10	2430	71	16	43	22	50	30	40	30
2240	57	02	34	36	40	20	32	20	2440	71	26	43	32	50	40	40	40
2250	57	12	34	46	40	30	32	30	2450	72	02	43	42	51	02	40	50
2260	57	22	35	00	40	40	32	40	2460	72	12	43	52	51	12	41	00
2270	57	32	35	10	41	02	32	50	2470	72	22	44	06	51	22	41	10
2280	58	08	35	20	41	12	33	00	2480	72	32	44	16	51	32	41	20
2290	58	18	35	30	41	22	33	10	2490	73	08	44	26	51	42	41	30
2300	58	28	35	40	41	32	33	20	2500	73	18	44	36	52	04	41	40

Example:—How many bushels of oats in 2,490 pounds?

Answer:—73 bushels and 8 pounds.

* And peas.

at Sight.

How to Find the Number of Bushels in a Load of Grain at Sight.

Barley.			*Wheat.		
lbs.			60 lbs.		
Lbs.	Bush.	Lbs.	Lbs.	Bush.	Lbs.
32	33	20			
42	33	30			
04	33	40			
14	33	50			
24	34	00			
34	34	10			
44	34	20			
06	34	30			
16	34	40			
26	34	50			
36	35	00			
46	35	10			
08	35	20			
18	35	30			
28	35	40			
38	35	50			
00	36	00			
10	36	10			
20	36	20			
30	36	30			
40	36	40			
02	36	50			
12	37	00			
22	37	10			
32	37	20			
42	37	30			
04	37	40			
14	37	50			
24	38	00			
34	38	10			
44	38	20			
06	38	30			
16	38	40			
26	38	50			
36	39	00			
46	39	10			
08	39	20			
18	39	30			
28	39	40			
38	39	50			
00	40	00			
10	40	10			
20	40	20			
30	40	30			
40	40	40			
02	40	50			
12	41	00			
22	41	10			
32	41	20			
42	41	30			
04	41	40			

Wgt.		Oats.	Corn, Rye		Barley.	*Wheat.		Wgt.		Oats.	Corn, Rye		Barley.	*Wheat.	
		34 lbs.	56 lbs.	48 lbs.	60 lbs.					34 lbs.	56 lbs.	48 lbs.	60 lbs.		
Bush.	Lbs.	Bush.	Lbs.	Bush.	Lbs.	Bush.	Lbs.	Bush.	Lbs.	Bush.	Lbs.	Bush.	Lbs.	Bush.	Lbs.
2510	73 28	44 46	52 14	41 50	3010	88 18	53 42	62 34	50 10						
2520	74 04	45 00	52 24	42 00	3020	88 28	53 52	62 44	50 20						
2530	74 14	45 10	52 34	42 10	3030	89 04	54 06	63 06	50 30						
2540	74 24	45 20	52 44	42 20	3040	89 14	54 16	63 16	50 40						
2550	75 00	45 30	53 06	42 30	3050	89 24	54 26	63 26	50 50						
2560	75 10	45 40	53 16	42 40	3060	90 00	54 36	63 36	51 00						
2570	75 20	45 50	53 26	42 50	3070	90 10	54 46	63 46	51 10						
2580	75 30	46 04	53 36	43 00	3080	90 20	54 56	64 08	51 20						
2590	76 06	46 14	53 46	43 10	3090	90 30	55 10	64 18	51 30						
2600	76 16	46 24	54 08	43 20	3100	91 06	55 20	64 28	51 40						
2610	76 26	46 34	54 18	43 30	3110	91 16	55 30	64 38	51 50						
2620	77 02	46 44	54 28	43 40	3120	91 26	55 40	65 00	52 00						
2630	77 12	46 54	54 38	43 50	3130	92 02	55 50	65 10	52 10						
2640	77 22	47 08	55 00	44 00	3140	92 12	56 04	65 20	52 20						
2650	77 32	47 18	55 10	44 10	3150	92 22	56 14	65 30	52 30						
2660	78 08	47 28	55 20	44 20	3160	92 32	56 24	65 40	52 40						
2670	78 18	47 38	55 30	44 30	3170	93 08	56 34	66 02	52 50						
2680	78 28	47 48	55 40	44 40	3180	93 18	56 44	66 12	53 00						
2690	79 04	48 02	56 02	44 50	3190	93 28	56 54	66 22	53 10						
2700	79 14	48 12	56 12	45 00	3200	94 04	57 08	66 32	53 20						
2710	79 24	48 22	56 22	45 10	3210	94 14	57 18	66 42	53 30						
2720	80 00	48 32	56 32	45 20	3220	94 24	57 28	67 04	53 40						
2730	80 10	48 42	56 42	45 30	3230	95 00	57 38	67 14	53 50						
2740	80 20	48 52	57 04	45 40	3240	95 10	57 48	67 24	54 00						
2750	80 30	49 06	57 14	45 50	3250	95 20	58 02	67 34	54 10						
2760	81 06	49 16	57 24	46 00	3260	95 30	58 12	67 44	54 20						
2770	81 16	49 26	57 34	46 10	3270	96 06	58 22	68 06	54 30						
2780	81 26	49 36	57 44	46 20	3280	96 16	58 32	68 16	54 40						
2790	82 02	49 46	58 06	46 30	3290	96 26	58 42	68 26	54 50						
2800	82 12	50 00	58 16	46 40	3300	97 02	58 52	68 36	55 00						
2810	82 22	50 10	58 26	46 50	3310	97 12	59 06	69 46	55 10						
2820	82 32	50 20	58 36	47 00	3320	97 22	59 16	69 56	55 20						
2830	83 08	50 30	58 46	47 10	3330	97 32	59 26	69 18	55 30						
2840	83 18	50 40	59 08	47 20	3340	98 08	59 36	69 28	55 40						
2850	83 28	50 50	59 18	47 30	3350	98 18	59 46	69 38	55 50						
2860	84 04	51 04	59 28	47 40	3360	98 28	60 00	70 00	56 00						
2870	84 14	51 14	59 38	47 50	3370	99 04	60 10	70 10	56 10						
2880	84 24	51 24	60 00	48 00	3380	99 14	60 20	70 20	56 20						
2890	85 00	51 34	60 10	48 10	3390	99 24	60 30	70 30	56 30						
2900	85 10	51 44	60 20	48 20	3400	100 00	60 40	71 00	56 40						
2910	85 20	51 54	60 30	48 30	3410	100 10	60 50	71 10	56 50						
2920	85 30	52 08	60 40	48 40	3420	100 20	61 04	71 12	57 00						
2930	86 06	52 18	61 02	48 50	3430	100 30	61 14	71 22	57 10						
2940	86 16	52 28	61 12	49 00	3440	101 06	61 24	71 32	57 20						
2950	86 26	52 38	61 22	49 10	3450	101 16	61 34	72 42	57 30						
2960	87 02	52 48	61 32	49 20	3460	101 26	61 44	72 04	57 40						
2970	87 12	53 02	61 42	49 30	3470	102 02	61 54	72 14	57 50						
2980	87 22	53 12	62 04	49 40	3480	102 12	62 08	72 24	58 00						
2990	87 32	53 22	62 14	49 50	3490	102 22	62 18	72 34	58 10						
3000	88 08	53 32	62 24	50 00	3500	102 32	62 28	72 44	58 20						

* And peas.

unds?

How to Find the Cost of Coal, Hay, Etc., at Sight.

COST PER POUND OR TON.

No. Lbs.	25	50	75	1 00	2 00	3 00	4 00	5 00	6 00	7 00	8 00	9 00	10 00	11 00	12 00
3
7
10
20
30
40
50
60
70
80
90
100
200
300
400
500
600
700
800
900
1000
1100
1200
1300
1400
1500
1600
1700
1800
1900
1 TON
2 "
3 "
4 "
5 "

Example: What is the cost of 1300 pounds of coal at \$4.50 per ton?

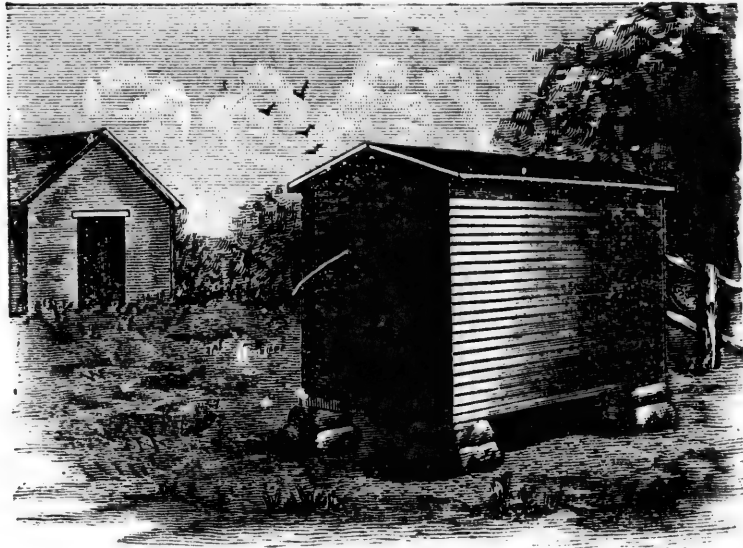
$$\text{Solution: } 1300 \text{ lbs. @ } \$4.00 = 2.60$$

$$1300 \text{ lbs. @ } 50c = .30$$

2.93 Ans.

Example: What is the cost of 1740 pounds of Hay at \$8.00 per ton?

$$\text{Solution: } 1740 \times 8 \div 2 = \$6.96. \text{ Ans.}$$



How to Measure Ear Corn in a Crib.

A bushel of corn means, either a bushel of shelled corn, or ear corn enough to make a bushel of shelled corn.

Rule.—Multiply the length in feet by the height in feet, and that again by the width in feet, multiply the result by 4, and cut off the right hand figure, and you have the contents in bushels of shelled corn.

Example : How many bushels of shelled corn in a crib of corn in the ear, 20 feet long, 10 feet high, and 8 feet wide ?

Solution : $20 \times 10 \times 8 \times 4 = 640.0$ bushels. Ans. This is counting $2\frac{1}{2}$ cubic feet to the bushel.

If the corn is medium good use the above rule. If good sound corn well settled multiply by 5 and cut off one figure instead of multiplying by 4.

When the crib is flared at the side multiply half the sum of the top and bottom widths in feet by the perpendicular height in feet, and then again by the length in feet, and then multiply the result by 4, and cut off the right hand figure.

Example : What is the contents of a crib 10 feet wide at the top, 6 feet wide at the bottom, 12 feet long, and 10 feet high ?

Solution : $10 + 6 \div 2 = 8$ feet average width. Then $12 \times 10 \times 8 \times 4 = 384.0$ bushels of shelled corn.

HOW TO FIND THE NUMBER OF HEAPED BUSHELS OF EAR CORN, APPLES OR POTATOES IN A CRIB OR BIN.

Rule.—Multiply the length in feet by the breadth in feet, and that again by the height in feet, and multiply the result by 6, and cut off the right hand figure, and that will equal the number of heaped bushels.

Example : How many bushels of potatoes in a bin 10 feet long, 8 feet wide, and 7 feet high ?

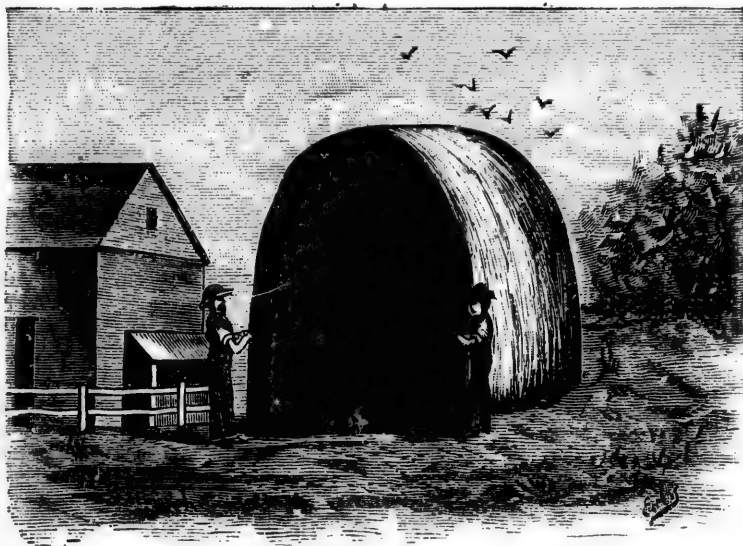
Solution : $10 \times 8 \times 7 \times 6 = 336.0$ heaped bushels.

N B. - Deduct $\frac{1}{8}$ for shuck.

\$	¢	\$	¢
11	00	12	00
2	2		
4	4		
6	6		
11	12		
17	18		
22	24		
28	30		
33	36		
39	42		
44	48		
50	54		
55	60		
1 10	1 20		
1 65	1 80		
2 20	2 40		
2 75	3 00		
3 30	3 60		
3 85	4 20		
4 40	4 80		
4 95	5 40		
5 50	6 00		
6 05	6 60		
6 60	7 20		
7 15	7 80		
7 70	8 40		
8 25	9 00		
8 80	9 60		
9 35	10 20		
9 90	10 80		
10 45	11 40		
11 00	12 00		
22 00	24 00		
33 00	36 00		
44 00	48 00		
55 00	60 00		

\$4.50

\$8.00



How to Measure Hay in the Mow or Stack.

A ton of dry hay is variously estimated from 400 to 500 cubic feet to the ton.

To be on the safe side, it is best to estimate about 500 cubic feet to the ton.

HAY IN A MOW.

Rule.—Multiply the length in feet by the height in feet, and this by the breadth in feet, and divide the result by 500, and you have the number of tons.

Example: How many tons of hay in a mow 20 feet long, 10 feet high, and 15 feet wide?

Solution: $20 \times 10 \times 15 \div 500 = 6$. Ans.

HOW TO ESTIMATE THE NUMBER OF TONS IN A STACK.

Rule.—Multiply the length in feet by the width in feet, and this by one-half the height, and divide the product by 300.

Example: How many tons of hay in a stack 20 feet long, 12 feet high, and 15 feet wide?

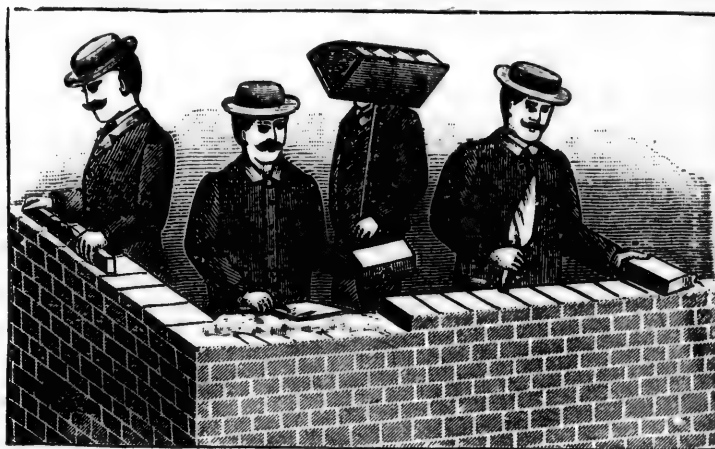
Solution: $20 \times 6 \times 15 \div 300 = 6$ tons. Ans.

HOW TO ESTIMATE THE CONTENTS OF A ROUND STACK.

Rule.—Multiply the square of the distance around the stack in yards by 4 times the height in yards, and point off two places from the right, and this will be the number of cubic yards in the stack, which divided by 20 will equal the number of tons.

Example: How many tons of hay in a stack, distance around the bulge, 25 yards, and height, 9 yards?

Solution: $25 \times 25 = 625$, then $625 \times 36 = 22,500$, pointing off two places makes 225, then $225 \div 20 = 11\frac{1}{4}$ tons. Ans.



HOW MANY BRICKS FOR A CHIMNEY.

Bricks for chimneys are generally estimated for each foot in height, as follows :

Chimney.	Size of Flue.	Number of brick for each foot in height.
16 x 16	8 x 8	30
20 x 20	12 x 12	40
16 x 24	8 x 16	40
20 x 24	12 x 16	45

How to Find the Number of Common Brick in a Wall or Building.

A BRICK is 8 inches long, 4 inches wide and two inches thick, and contains 64 cubic inches. Twenty-seven brick make one cubic foot of wall without mortar, and it takes from 20 to 22 bricks according to the amount of mortar used to make a cubic foot of wall with mortar.

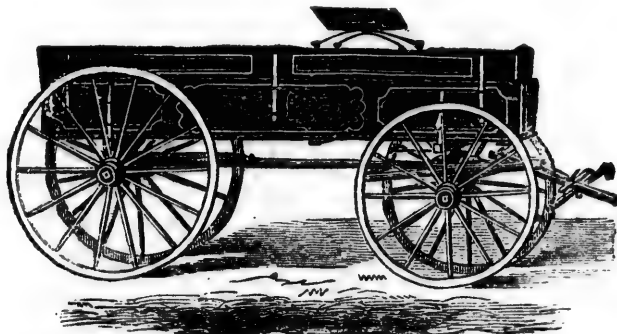
Rule—Multiply the length of the wall in feet by the height in feet, and that by its thickness in feet, and then multiply that result by 20, and the product will be the number of bricks in the wall.

Example : How many bricks in a wall 3 feet long, 20 feet high, and 18 inches thick ?

Solution : 30 length \times 20 height \times 1½ thick = 900 \times 20 = 18,000. Ans.

N. B.—For a wall 8 inches thick, multiply the length in feet by the height in feet, and that result by 15, and the product will equal the number of bricks.

When doors and windows occur in the wall, multiply their height, width and thickness together, and deduct the amount from the solid contents of the wall before multiplying by 20 or 15, as the case may be.



How to Find the Contents of a Wagon Box.

A common Wagon Box is a little more than ten feet long and three feet wide, and will hold about two bushels for every inch in depth.

Rule.—Multiply the depth of the wagon box in inches by 2, and you have the number of bushels.

If the wagon box is 11 feet long, multiply the depth in inches by 2, and add one-tenth of the number of bushels to itself.

Example: How many bushels of grain will a wagon box hold 22 inches deep and 10 feet long?

Solution: $22 \times 2 = 44$. Ans.

N. B.—A bushel to the inch is calculated for corn on the cob.

How to Find the Number of Bushels of Grain in a Bin or Box.

Rule.—Multiply the length in feet by the height in feet, and then again by the breadth in feet, and then again by 8, and cut off the right hand figure. The last result will be the number of bushels.

Example: How many bushels in a bin 12 feet long, 10 feet wide, and 6 feet high?

Solution: $12 \times 10 \times 6 \times 8 = 576.0$. Ans.

NOTE.—For exact results multiply the length in inches by the height in inches, and that again by the width in inches, and divide the result by 2150.4, the number of cubic inches in a bushel.

BUSHEL.

The dimensions of the bushel are $18\frac{1}{2}$ inches inner diameter; $19\frac{1}{2}$ inches outer diameter, and 8 inches deep; and when heaped, the cone is not to be less than 6 inches high; which makes a heaped bushel equal to $1\frac{1}{4}$ struck ones. To reduce U. S. dry measures to British ones of the same name, divide by 1.031516; to reduce British ones to U. S., multiply by 1.031516; or for common purposes use 1.032.



BARRELS.

In measuring cisterns, reservoirs, vats, etc., the barrel is estimated at $31\frac{1}{2}$ gallons, and the hogshead at 63 gallons.

A gallon of water weighs nearly $8\frac{1}{2}$ pounds, avoirdupois.

A pint is generally estimated as a pound.

How to Find the Contents of Barrels or Casks.

Rule.—Add together the diameters of the bung and head in inches, and divide the sum by 2, which equals the average diameter. Then multiply the average diameter by itself in inches and again by the height in inches, then multiply by 8, and cut off the right hand figure, and you have the number of cubic inches. Divide by 231 and you have the number of gallons. To find the number of bushels divide by 2150.4.

Example : What is the contents of a barrel in gallons, whose middle or bung diameter is 22 inches, and end diameter 18 inches, and 30 inches in height?

Solution : $22+18 \div 2=20$ average diameter.

$$20 \times 20 \times 30 \times 8 = 9600.0$$

$$9600 \div 231 = 41\frac{1}{2} \text{ gallons. Ans.}$$

NOTE.—Barrels used in commerce are made in various sizes, from 30 to 50 gallons. There is no definite measure called a hogshead, they are usually gauged, and have their capacities in gallons marked on them.



How to Find the Contents of a Round Tank.

Multiply the square of the diameter in feet by the depth in feet, and multiply this result by 6, and you have the approximate contents of the tank in gallons. (For exact results multiply the product by $5\frac{7}{8}$, instead of 6.)

Example : How many gallons will a tank hold 6 feet in diameter and 8 feet deep ?

Solution : $6 \times 6 \times 8 = 288$.

$288 \times 6 = 1728$ gallons. **Ans.**

NOTE.—If the tank is larger at the bottom than at the top, find the average diameter by measuring the middle part of the tank, half way between the top and bottom.

FOR MORE EXACT RESULTS.

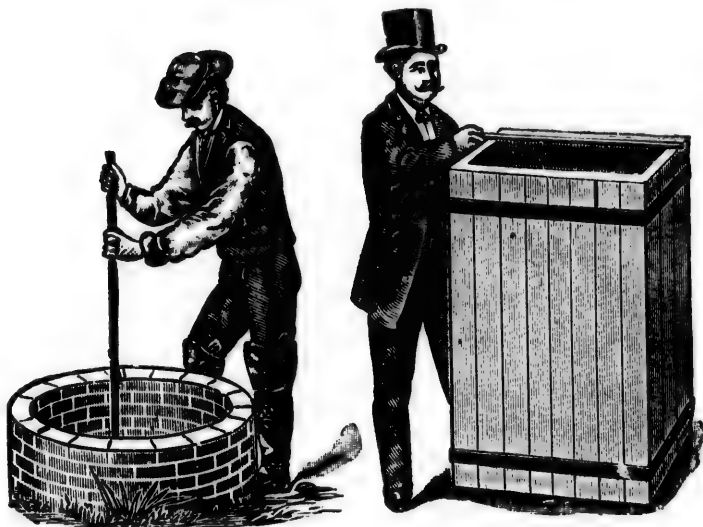
Rule.—Multiply the square of the diameter in feet, and multiply this result by 47, and divide the product by 8, and you will have the number of gallons.

NOTE.—In calculating the capacity of tanks, $31\frac{1}{2}$ gallons are estimated to one barrel, and 63 gallons to one hogshead.

A TABLE FOR CIRCULAR TANKS ONE FOOT IN DEPTH.

Five feet in diameter holds	$4\frac{1}{2}$ barrels.
Six feet in diameter holds	$6\frac{3}{4}$ “
Seven feet in diameter holds.....	9 “
Eight feet in diameter holds.....	12 “
Nine feet in diameter holds.	15 “
Ten feet in diameter holds.....	$19\frac{1}{2}$ “

N. B.—To find the contents of a tank by the table, multiply the contents of one foot in depth by the number of feet deep.



Shorter Forms of How to Find the Contents of Cylindrical Cisterns, Tanks, Etc.

If you cut the largest possible square from a circle drawn on paper, the square will be a little more than $\frac{3}{4}$ of the whole circle. Therefore, to find the area of a circle, take $\frac{3}{4}$ of the square of the diameter (or for exactness .78) and the result will be the area of the circle.

Rule.—Multiply the square of the diameter of the cistern in feet, by the height in feet, and divide this result by 5, and it will equal the number of barrels the cistern will hold (approximately). (Or for exact results, instead of dividing by 5, take $\frac{3}{16}$ of the product.

Example : A cistern is 5 feet in diameter, and 8 feet deep.
How many barrels will it hold ?

Solution : $5 \times 5 \times 8 = 200$.

$200 \div 5 = 40$ barrels. **Ans.**

To find the number of gallons, multiply by $31\frac{1}{2}$.

To Find the Number of Barrels in a Square Cistern.

Multiply the height, width and depth together, and divide the product obtained by 4 (or for exactness, by 4.2), and the result will equal the number of barrels of $31\frac{1}{2}$ gals. each, the cistern will hold.

Example : $4 \times 8 \times 5 = 160$.

$160 \div 4 = 40$ barrels.



How to Find the Contents of a Watering-Trough.

Rule.—Multiply the height in feet by the length in feet, and the product by the width in feet, and divide the result by 4, and you will have the contents in barrels or $81\frac{1}{2}$ gallons each.

Example : What is the contents of a watering trough 8 feet long, 4 feet wide, and 3 feet deep ?

Solution : $3 \times 4 \times 8 \div 4 = 24$ barrels.

NOTE.—For exact results multiply the length in inches by the height in inches, by the width in inches, and divide the result by 231, and you will have the contents in gallons.

Table for Finding the Contents of Square Tanks.

A Tank	Five feet by five feet holds	6	barrels.
"	Six feet by six feet holds	$8\frac{1}{2}$	"
"	Seven feet by seven feet holds ...	$11\frac{1}{2}$	"
"	Eight feet by eight feet holds	$15\frac{1}{2}$	"
"	Nine feet by nine feet holds	$19\frac{1}{2}$	"
"	Ten feet by ten feet holds	$23\frac{3}{4}$	"

The above table is for one foot of depth only.

To find the contents of a trough, measure its depth in feet and multiply it by the contents of one foot in depth.

HOW MUCH ADVANTAGE IS GIVEN BY CHANGING THE EVENER.



How Much Advantage is Given by Changing the Evener.

Caution.—In moving the center pin of an evener one inch toward one of the end pins it changes the draft twice as much as it does to move one of the end pins one inch toward the center pin. Or in other words, moving the center pin changes the draft twice as much as changing one of the end pins or clevises.

An average evener is 42 inches in length.

Now if the center pin is moved one inch from the center to the right or left, the horse drawing on the short end will pull about $\frac{1}{20}$ more than the horse drawing on the opposite end.

If one of the end pins is moved one inch the difference will be about $\frac{1}{40}$.

Example: If a team of horses draw 2000 pounds, and the center pin is moved one inch from the center, what part of the whole load will each draw?

$$2000 \times \frac{1}{20} = 100 \text{ pounds, the difference.}$$

$$100 + 1000 = 1100 \text{ pounds.}$$

$$1000 - 100 = 900 \text{ pounds.}$$

Hence the horse at the short end of the evener draws 1100 lbs., and the other horse draws 900 lbs.

The draught on a 14-inch plow plowing 4 inches deep, is about 1000 lbs.; 5 inches deep, 1250 lbs.; 6 inches deep, 1500 lbs.



How to Find the Distance Traveled in Ploughing.

Showing the distance traveled by a horse in ploughing an acre of land, and the quantity of land cultivated per day, computed at the rate of 16 and 18 miles per day of 9 hours :

Breadth of furrow slice.	Space traveled in ploughing an acre.	Extent ploughed per day.		Breadth of furrow slice.	Space traveled in ploughing an acre.	Extent ploughed per day.	
		18 Mi.	16 Mi.			18 Mi.	16 Mi.
7	14 $\frac{1}{2}$	1 $\frac{1}{4}$	1 $\frac{1}{8}$	14	7	2 $\frac{1}{2}$	2 $\frac{1}{4}$
8	12 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{8}$	15	6 $\frac{1}{2}$	2 $\frac{3}{4}$	2 $\frac{3}{8}$
9	11	1 $\frac{3}{4}$	1 $\frac{1}{2}$	16	6	2 $\frac{3}{4}$	2 $\frac{3}{8}$
10	9 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	17	5 $\frac{3}{4}$	3 $\frac{1}{10}$	2 $\frac{3}{4}$
11	9	2	1 $\frac{3}{4}$	18	5 $\frac{1}{2}$	3 $\frac{1}{2}$	2 $\frac{9}{10}$
12	8 $\frac{1}{4}$	2 $\frac{1}{4}$	1 $\frac{5}{8}$	19	5 $\frac{1}{4}$	3 $\frac{1}{2}$	3 $\frac{1}{10}$
13	7 $\frac{1}{2}$	2 $\frac{1}{8}$	2 $\frac{1}{10}$	20	4 $\frac{9}{10}$	3 $\frac{1}{2}$	3 $\frac{1}{4}$

General Observations.

1. There are 43,560 square feet in an acre.
2. A piece of land 1 foot wide and 43,560 feet long is one acre
3. 43,560 feet equal 8 $\frac{1}{4}$ miles.
4. There are a less number of turns in ploughing a long and narrow field than in ploughing a square one containing the same number of acres.
- 5 It takes less fence per acre to inclose a square field than it does to inclose a long and narrow field containing the same number of acres.



Facts Concerning Stone-work, Brick-Work and Plastering.

STONE-WORK.

1. A cord of stone, three bushels of lime and a cubic yard of sand will make 100 cubic feet of wall.
2. One cubic foot of stone-work weighs from 130 to 175 pounds.

BRICK-WORK.

3. Five courses of brick will make one foot in height on a chimney.
4. One cubic foot of brick-work with common mortar weighs from 100 to 110 pounds.
5. A cask of lime will make mortar sufficient for 1000 bricks.

FOR PLASTERING.

6. Six bushels of lime, 40 cubic feet* of sand, and $1\frac{1}{2}$ bushels of hair will plaster 100 square yards with two coats of mortar.

* N. B.—There are about $1\frac{1}{4}$ cubic feet in a bushel.

Short Method of Estimating Stone-work.

Rule.—Multiply the length in feet by the height in feet, and that by the thickness in feet, and divide this result by 22, and the quotient will be the number of perches of stone in the wall.

Example: A wall is $4 \times 15 \times 2 = 120$ the solid contents.
 $120 \div 22 = 5\frac{5}{11}$ perches.

N. B.—In a perch of stone there are $24\frac{3}{4}$ cubic feet, but $2\frac{3}{4}$ cubic feet are generally allowed for the mortar and filling.

FOR APPROXIMATE RESULTS.

Rule.—Multiply the length in feet by the height in feet by the thickness in feet, and multiply that result by 4, cutting off the two right hand figures, and the product will equal the number of perches of stone.

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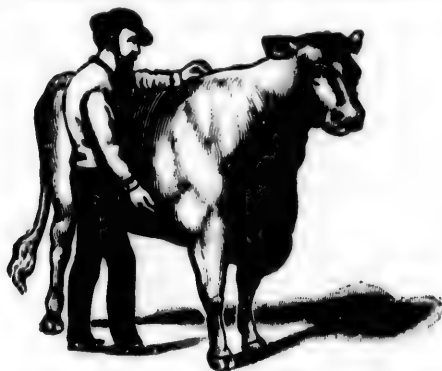
16 Mi.

$2\frac{1}{4}$
 $2\frac{1}{4}$
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How to Find the Weight of Cattle by Measurement.

To find the approximate weight, measure as follows: 1. The girth behind the shoulders. 2. The length from the fore-part of the shoulder-blade along the back to the bone at the tail, in a vertical line with the buttocks. Then multiply the square of the girth in feet by five times the length in feet. Divide the product by 1.5 for average cattle, (if cattle be very fat, by 1.425; if very lean, by 1.575; and the quotient will be the dressed weight of the quarters. Thus: the girth of a steer is 6.5 feet, and the length from the shoulder-blade to the tail bone is 5.25. The square of 6.5 is 42.25, and 5 times 5.25 is 26.25. Multiplying these together gives 1109.0625, which, when divided by 1.5, produces 739.375 lbs. the approximate net weight of the steer after being dressed.

THE SHORT METHOD.

Multiply the length around the animal (back of the fore-shoulder) by itself, then multiply that result by 7 and divide the product thus obtained by 2, and you have the weight of the animal (nearly).

How to Find the Amount of Paper to Paper a Room.

Measure the distance around the room; deduct the width of each window and door; take $\frac{2}{3}$ of the result, and it will equal the number of strips required. Divide the result thus found by the number of strips that can be cut from one roll, and it will equal the number of rolls required to paper the room.

Each roll is $1\frac{1}{2}$ feet wide, 24 feet long and contains 36 square feet or 4 square yards.



How to Measure a Day's Work in the Corn-Field.

If the corn is 3 ft. and 8 inches each way in rows, as is usually the case, it will take 3,240 *hills of corn* to make an acre.

Rule.—Count the hills in one row, multiply that sum by the number of rows, and divide that result by 3,240, and the result obtained will equal the number of acres.

Example : A field contains 40 rows of corn, and each row contains 810 hills. How many acres in the field ?

Solution : $810 \times 40 = 32,400$ total number of hills.

$32,400 \div 3,240 = 10$ the number of acres.

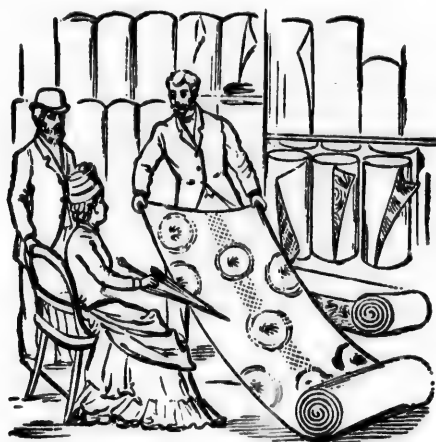
THREE FEET APART.

If plants or hills are three feet apart each way, it will take 4,840 hills to the acre.

SHOCKED CORN.

Eight hills each way, or 64 hills, are usually cut for one shock. If the rows are 3 ft. 8 inch. apart each way, it will require 50 shock to make one acre of corn.

NOTE.—It is generally estimated that two bushels of corn on the cob will make one bushel of shelled corn.



How to Find the Number of Yards of Carpet to Cover a Floor.

Rule.—Multiply the length of the room in feet by the width in feet, and divide the result by the number of square feet in one yard of carpeting, and the result will equal the number of yards of carpeting it will take to cover the floor.

NOTE.—To find the number of square feet in one yard of carpet, multiply the width of your carpet by 3 (the length of one yard), and the result will be the number of square feet in one yard.

Or for greater accuracy, multiply the length of the room in inches by the width in inches, and divide the result by the number of square inches in one yard of your carpet.

Or divide the width of your carpet in inches into the width of the room in inches, and the result will be the number of strips, multiply the number of strips by the length of your room, and the result will equal the number of yards of carpeting to cover the floor.

Example : A room is 12 feet 9 inches by 14 feet 6 inches, which I wish to cover with carpet one yard wide.

Solution : $12\frac{3}{4} \times 14\frac{1}{2} = 184\frac{7}{8}$ square feet in the room.

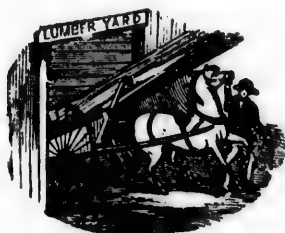
$184\frac{7}{8} \div 9 = 20\frac{1}{2}$ yards, nearly.

Or by inches, 12 ft. and 9 in. = 153 inches.

14 ft. and 6 in. = 174 inches.

$153 \times 174 = 26622$ square inches in the floor.

$26622 \div 1296$ (sq. in. in one yd.) = $20\frac{1}{2}$ yds. nearly.



THE LIGHTNING METHOD FOR MEASURING LUMBER.

1. A FOOT OF LUMBER is one foot long, one foot wide and one inch thick.
2. PIECE STUFF OR DIMENSION STUFF is lumber that is two or more inches thick and of uniform width and length.
3. SCANTLING is usually from three to four inches wide and from two to four inches thick.
4. JOIST is 2-inch lumber of any width.
5. PLANK is two inches in thickness and wider than a scantling.

Rule for 12-foot Boards: Find the width of the boards in inches and add together, and the sum obtained will be equal to the number of feet in the pile. (Each inch in width equals one foot of lumber.)

Note: Use no fractions. If a board is between 9 and 10 inches wide, but nearer 9 than 10, call it 9; if nearer 10 than 9, call it 10. If it is $9\frac{1}{2}$, call it either 9 or 10.

For 14-foot Boards add the width of the boards in inches, and to the sum add $\frac{1}{6}$ of itself, and the result will equal the number of feet in the pile.

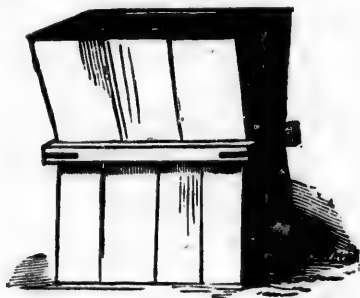
For 16-foot Lumber, add the width of the boards in inches and to that sum add $\frac{1}{3}$ of itself, and you will have the number of feet in the pile.

Example : How many feet of lumber in 10 boards, 9 inches wide, and 16 feet long ?

Solution, $10 \times 9 = 90$.

$\frac{1}{3}$ of $90 = 30$.

$30 + 90 = 120$, the number of feet.



How to Find the Number of Shingles Required for a Roof.

Rule.—Multiply the length of the ridge pole by twice the length on one rafter, and, if the shingles are to be exposed $4\frac{1}{2}$ inches to the weather, multiply by 8, and if exposed 5 inches to the weather, multiply by 7, and you have the number of shingles.

NOTE.—Shingles are 16 inches long, and average about 4 inches wide. They are put up in bundles of 250 each.

How to Find the Number of Laths for a Room.

Rule.—Find the number of square yards in the room, and multiply by 18, and the result will be the number of laths.

NOTE.—Laths are usually 4 feet long, and 1 inch wide, and $\frac{1}{4}$ inch thick. It is estimated that 1000 laths, set $\frac{1}{4}$ of an inch apart, cover about 55 square yards.

How to Find the Number of Cords in a Pile of Wood.

A cord of wood is a pile 8 feet long, 4 feet wide and 4 feet high and contains 128 cubic feet.

Rule.—Multiply the length in feet by the width in feet and that result by the length in feet and divide the product by 128 and you have the number of cords.

Example: How many cords in a pile of wood 4 feet wide, 7 feet high, 24 feet long?

Solution: $4 \times 7 \times 24 = 672$ cubic feet. $672 \div 128 = 5\frac{1}{4}$ cords. Ans.

The Actual Weight of Dry Pine Lumber.

Timber.....	3 lbs. per ft.	White Pine Flooring.....	1.9 lbs. per ft.
Joists.....	2.8 " " "	Norway Flooring.....	2.3 " " "
Inch Lumber (rough).....	2.6 " " "	Shingles.....	250 " " M.
Inch " (dressed).....	2.3 " " "	Laths	500 " " M.



JOISTS, SCANTLING AND TIMBER MEASUREMENT.

Size in Inches	Length in Feet.									
	12	14	16	18	20	22	24	26	28	30
2 x 4.....	8	9	11	12	13	15	16	17	19	20
2 x 6.....	12	14	16	18	20	22	24	26	28	30
2 x 8.....	16	19	21	24	27	29	32	35	37	40
2 x 10.....	20	23	27	30	33	37	40	43	47	50
2 x 12.....	24	28	32	36	40	44	48	52	56	60
3 x 4.....	12	14	16	18	20	22	24	26	28	30
3 x 6.....	18	21	24	27	30	33	36	39	42	45
3 x 8.....	24	28	32	36	40	44	48	52	56	60
3 x 10.....	30	35	40	45	50	55	60	65	70	75
3 x 12.....	36	42	48	54	60	66	72	78	84	90
4 x 4.....	16	19	21	24	27	29	32	35	37	40
4 x 6.....	24	28	32	36	40	44	48	52	56	60
4 x 8.....	32	37	43	48	53	59	64	69	75	80
4 x 10.....	40	47	53	60	67	73	80	87	93	100
4 x 12.....	48	56	64	72	80	88	96	104	112	120
6 x 6.....	36	42	48	54	60	66	72	78	84	90
6 x 8.....	48	56	64	72	80	88	96	104	112	120
6 x 10.....	60	70	80	90	100	110	120	130	140	150
6 x 12.....	72	84	96	108	120	136	144	156	168	180
8 x 8.....	64	75	85	96	107	117	128	139	149	160
8 x 10.....	80	93	107	120	133	147	160	173	187	200
8 x 12.....	96	112	128	144	160	176	192	208	224	240
10 x 10.....	100	117	133	150	167	183	200	217	233	250
10 x 12.....	120	140	160	180	200	220	240	260	280	300
12 x 12.....	144	168	192	216	240	264	288	312	336	360
12 x 14.....	168	196	224	252	280	308	336	364	392	420
14 x 14.....	196	229	261	294	327	359	392	425	457	490

Example: A timber 12 by 14 inches, 18 feet long, contains 252 square feet.

Board and Plank Measurement—At Sight.

This table gives the sq. ft. and inches in Board from 6 to 25 in. wide, and from 8 to 36 ft. long. If a board be longer than 36 ft., unite two numbers. Thus, if a board is 40 ft. long, and 16 in. wide, add 36 and 10 and you have 53 ft. 4 inches. For 2 in. plank double the product.

Feet Long.	6 in.	7 in.	8 in.	9 in.	10 in.	11 in.	12 in.	13 in.	14 in.	15 in.
	ft.in.	ft.in.	ft.in.	ft.in.	ft.in.	ft.in.	ft.in.	ft.in.	ft.in.	ft.in.
8...	4 0	4 8	5 4	6 0	6 8	7 4	8 0	8 8	9 4	10 0
9...	4 6	5 3	6 0	6 9	7 6	8 3	9 0	9 9	10 6	11 3
10...	5 0	5 10	6 8	7 6	8 4	9 2	10 0	10 10	11 8	12 6
11...	5 6	6 5	7 4	8 3	9 2	10 1	11 0	11 11	12 10	13 9
12...	6 0	7 0	8 0	9 0	10 0	11 0	12 0	13 0	14 0	15 0
13...	6 6	7 7	8 8	9 9	10 10	11 11	12 12	13 13	14 14	15 15
14...	7 0	8 2	9 4	10 6	11 8	12 10	13 12	14 14	15 16	16 18
15...	7 6	8 9	10 0	11 3	12 6	13 9	15 0	16 3	17 6	18 9
16...	8 0	9 4	10 8	12 0	13 4	14 8	16 0	17 4	18 8	20 0
17...	8 6	9 11	11 4	12 9	14 2	15 7	17 0	18 5	19 10	21 3
18...	9 0	10 6	12 0	13 6	15 0	16 6	18 0	19 6	21 0	22 6
19...	9 6	11 1	12 8	14 3	15 10	17 5	19 0	20 7	22 2	23 9
20...	10 0	11 8	13 4	15 0	16 8	18 4	20 0	21 8	23 4	25 0
21...	10 6	12 3	14 0	15 9	17 6	19 3	21 0	22 9	24 6	26 3
22...	11 0	12 10	14 8	16 6	18 4	20 2	22 0	23 10	25 8	27 6
23...	11 6	13 5	15 4	17 3	19 2	21 1	23 0	24 11	26 10	28 9
24...	12 0	14 0	16 0	18 0	20 0	22 0	24 0	26 0	28 0	30 0
25...	12 6	14 7	16 8	18 9	20 10	22 11	25 0	27 1	29 2	31 3
26...	13 0	15 2	17 4	19 5	21 8	23 10	26 0	28 2	30 4	32 6
27...	13 6	15 9	18 0	20 8	22 6	24 9	27 6	29 3	31 6	33 9
28...	14 0	16 4	18 8	21 0	23 4	25 8	28 0	30 4	32 8	35 0
29...	14 6	16 11	19 4	21 9	24 2	26 7	29 0	31 5	33 10	36 3
30...	15 0	17 6	20 0	22 6	25 0	27 6	30 0	32 6	35 0	37 6
31...	15 6	18 1	20 8	23 3	25 10	28 5	31 0	33 7	36 2	38 9
32...	16 0	18 8	21 4	24 0	26 8	29 4	32 0	34 8	37 4	40 0
33...	16 6	19 3	22 0	24 9	27 6	30 3	33 0	35 9	38 6	41 3
34...	17 0	19 10	22 8	25 6	28 4	31 2	34 0	36 10	39 8	42 6
35...	17 6	20 5	23 4	26 3	29 2	32 1	35 0	37 11	40 10	43 9
36...	18 0	21 0	24 0	27 0	30 0	33 0	36 0	39 0	42 0	45 0

	16 in.	17 in.	18 in.	19 in.	20 in.	21 in.	22 in.	23 in.	24 in.	25 in.
8...	10 8	11 4	12 0	12 8	13 4	14 0	14 8	15 4	16 0	16 8
9...	12 0	12 9	13 6	14 3	15 0	15 9	16 6	17 3	18 0	18 9
10...	13 4	14 2	15 0	15 10	16 8	17 6	18 4	19 2	20 0	20 10
11...	14 8	15 7	16 6	17 5	18 4	19 3	20 2	21 1	22 0	22 11
12...	16 0	17 0	18 0	19 0	20 0	21 0	22 0	23 0	24 0	25 0
13...	17 4	18 5	19 6	20 7	21 8	22 9	23 10	24 11	26 0	27 1
14...	18 8	19 10	21 0	22 2	23 4	24 6	25 8	26 10	28 0	29 2
15...	20 0	21 3	22 6	23 9	25 0	26 3	27 6	28 9	30 0	31 3
16...	21 4	22 8	24 0	25 4	26 8	28 0	29 4	30 8	32 0	33 4
17...	22 8	24 1	25 6	26 11	28 4	29 9	31 2	32 7	34 0	35 5
18...	24 0	25 6	27 0	28 6	30 0	31 6	33 0	34 6	36 0	37 6
19...	25 4	26 11	28 6	30 1	31 8	33 3	34 10	36 5	38 0	39 7
20...	26 8	28 4	30 0	31 8	33 4	35 0	36 8	38 4	40 0	41 8
21...	28 0	29 9	31 6	33 3	35 0	36 9	38 6	40 3	42 0	43 9
22...	29 4	31 2	33 0	34 10	36 8	38 6	40 4	42 2	44 0	45 10
23...	30 8	32 7	34 6	36 5	38 4	40 3	42 2	44 1	46 0	47 11
24...	33 0	34 0	36 0	38 0	40 0	42 0	44 0	46 4	48 0	50 0
25...	34 4	35 5	37 6	39 7	41 8	43 9	45 10	47 11	50 0	52 1
26...	35 8	36 10	39 0	41 2	43 4	45 6	47 8	49 10	52 0	54 2
27...	36 0	38 3	40 6	42 9	45 0	47 3	49 6	51 9	54 0	56 3
28...	37 4	39 8	42 0	44 4	46 8	49 0	51 4	53 8	56 0	58 4
29...	38 8	41 1	43 6	45 11	48 4	50 9	53 2	55 7	58 0	60 5
30...	40 0	42 3	45 0	47 6	50 0	51 6	55 0	57 6	60 0	62 6

HOW TO REDUCE LOGS TO INCH BOARD MEASURE.

5 ft. long
and 16 in.

15 in.
w.
ft. in.

10 0
11 3
12 6
13 9
15 0
16 3
17 6
18 9
20 0
21 3
22 6
23 9
25 0
26 3
27 6
28 9
30 0
31 3
32 6
33 9
35 0
36 3
37 6
38 9
40 0
41 3
42 6
43 9
45 0

25 in.

16 8
18 9
20 10
22 11
25 0
27 1
29 2
31 3
33 4
35 5
37 6
39 7
41 8
43 9
45 10
47 11
50 0
52 1
54 2
56 3
58 4
60 5
62 6

L. Feet..	Diam. 12	Diam. 13	Diam. 14	Diam. 15	Diam. 16	Diam. 17	Diam. 18	Diam. 19	Diam. 20	Diam. 21	Diam. 22	Diam. 23	Diam. 24	Diam. 25	Diam. 26	Diam. 27	Diam. 28
10	49	61	72	89	99	116	133	150	175	190	209	235	252	287	313	342	363
11	54	67	79	98	109	127	147	165	192	209	230	259	278	315	344	377	400
12	59	73	86	107	119	139	160	180	210	228	251	283	303	344	373	411	436
13	64	79	93	116	129	150	173	195	227	247	272	306	328	373	408	445	473
14	69	85	100	125	139	162	187	210	245	266	292	330	353	401	439	479	509
15	64	91	107	134	149	173	200	225	262	285	313	353	379	430	469	514	545
16	79	97	114	142	159	185	213	240	280	304	334	377	404	459	500	548	582
17	83	103	122	151	168	196	227	255	297	323	355	400	429	478	531	582	618
18	88	109	129	160	178	208	240	270	315	342	376	424	454	516	562	616	654
19	93	116	136	169	188	219	253	285	332	361	397	447	480	545	594	650	692
20	98	122	143	178	198	232	267	300	350	380	418	470	505	573	625	684	728
21	103	128	150	187	208	243	280	315	368	399	439	495	530	602	656	719	764
22	108	134	157	196	218	255	293	330	385	418	460	518	555	631	688	753	800
23	113	140	164	205	228	266	307	345	403	437	480	542	581	659	719	787	837
24	118	146	172	214	238	278	320	360	420	456	501	566	606	688	750	821	873
25	123	152	179	223	248	289	333	375	438	475	522	589	631	717	781	850	910

L. Feet..	Diam. 29	Diam. 30	Diam. 31	Diam. 32	Diam. 33	Diam. 34	Diam. 35	Diam. 36	Diam. 37	Diam. 38	Diam. 39	Diam. 40	Diam. 41	Diam. 42	Diam. 43
10	381	411	408	460	490	500	547	577	644	667	700	752	795	840	872
11	419	451	448	506	569	550	602	634	718	734	770	828	874	924	959
12	457	493	532	552	588	600	657	692	772	801	840	903	954	1007	1046
13	495	534	570	598	637	650	712	750	836	868	910	978	1033	1091	1134
14	533	575	622	644	686	700	766	807	901	934	980	1053	1113	1175	1221
15	571	616	666	690	735	750	821	865	965	1001	1050	1129	1192	1269	1309
16	609	657	710	736	784	800	876	923	1029	1068	1120	1204	1272	1343	1396
17	647	698	756	782	833	850	930	980	1094	1134	1190	1279	1351	1427	1483
18	685	739	799	828	882	900	985	1038	1158	1201	1260	1354	1431	1511	1570
19	723	780	843	874	931	950	1040	1096	1222	1268	1330	1430	1510	1595	1658
20	761	821	888	920	980	1000	1095	1152	1287	1335	1400	1505	1590	1679	1745
21	800	863	932	966	1027	1050	1150	1210	1351	1401	1470	1580	1669	1763	1832
22	838	904	976	1012	1078	1100	1204	1268	1426	1468	1540	1656	1749	1847	1919
23	876	945	1021	1058	1127	1150	1259	1322	1490	1535	1610	1731	1828	1931	2006
24	914	986	1065	1104	1176	1200	1314	1380	1545	1602	1680	1806	1908	2015	2094
25	952	1027	1109	1150	1225	1250	1369	1438	1609	1668	1750	1881	1987	2099	2182

HOW TO USE THE LOG TABLE.

First find the average diameter of the log by adding together the two ends of the log, in inches; then divide by two and the result will equal the average diameter, and then apply the above table.

Example.—How many feet of lumber is there in a log 15 inches at one end and 21 inches at the other, and 22 feet long?

Solution.— $15 + 21 = 36$ one half of $36 = 18$ inches the average diameter.

Then refer to the column under 18 inches opposite of 22 and you will find the answer—293 feet.



How to Ascertain the Number of Feet (Board Measure) in a Log.

Rule: Subtract from the diameter of the log in inches, 4 inches (for slabs), one-fourth of this result squared and multiplied by the length in feet, will give the correct amount of lumber made from any log.

Example:—How many feet of lumber can be made from a log which is 36 inches in diameter and 10 feet long?

Solution:—From 36 (diameter) subtract 4 (for slabs) = 32. Take $\frac{1}{4}$ of 32 = 8, which multiplied by itself equals 64. Then multiply 64 by 10 (length) = 640. Ans.

How to Find the Number of Cubic Feet in a Log.

Rule.—Multiply $\frac{1}{4}$ of the average circumference by itself, and this product by the length, the result will be the contents in cubic feet.

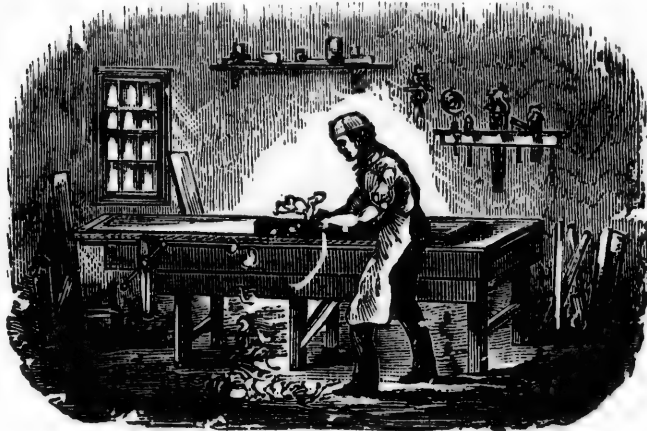
How to Measure Wood.

Wood is measured by the cord, which contains 128 cubic feet.

Rule.—Multiply the length in feet by the height in feet, and that again by the breadth in feet, and divide the result by 128, and you have the number of cords.

Example:—How many cords in a pile of wood 6 feet high, 12 feet long, and 4 feet wide?

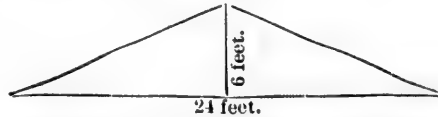
Solution:— $4 \times 6 \times 12 \div 128 = 2\frac{1}{4}$ cords. Ans.



A COMPLETE SET OF CARPENTER'S RULES.

PLAIN, SIMPLE AND PRACTICAL.

1. THE GABLE is a space the form of a triangle on the end of a building, with a common double roof.
2. QUARTER PITCH.—Is a roof that is one-fourth as high as the width of the building.



Rule.—To find the area of the gable end, multiply the width of the building by the height of the roof, and take one-half of the result. Or, if the roof is "quarter pitch," find the area by multiplying the width of the roof by $\frac{1}{2}$ of itself.

3. To find the number of feet of stock boards to cover a house or barn.

Rule.—Multiply the distance around the barn by the height of the posts, and to this result add the area of the two gable ends. (If there are many openings, allowance should be made for them).

4. SHINGLES.—There are 250 shingles in a bunch.

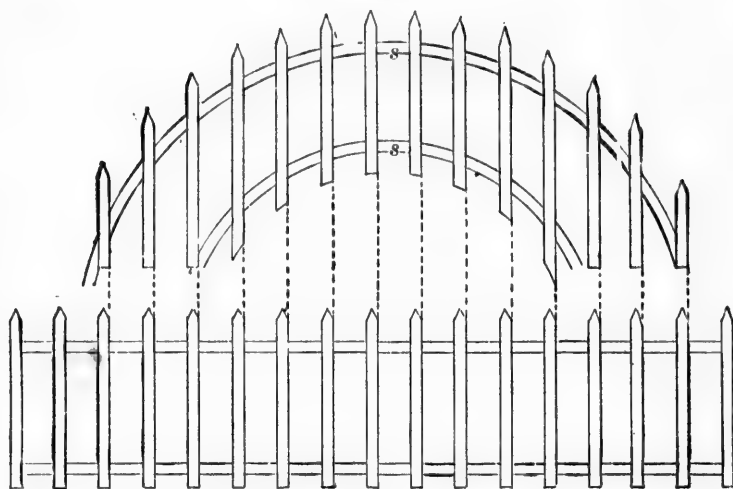
Rule.—One thousand shingles, laid 4 inches to the weather, will cover 100 square feet, and 900 shingles laid $4\frac{1}{2}$ inches to the weather, will cover 100 square feet.

5. **FLOORS AND SIDING.**—To find the number of feet of six-inch *matched flooring* for a given floor. Find the number of square feet of surface to be covered, and add $\frac{1}{2}$ of itself to it, and the result will be the required number of feet.

6. **For 3-INCH FLOORING.** Find the number of square feet to be covered, to which add $\frac{1}{4}$ of itself.

7. **LATH—50 in a bunch.**

Contractor's Rule.—One bunch of lath will cover 3 square yards.



Does It Take More Pickets to Build Over a Hill than on a Level?

Many arguments and discussions have taken place over this simple problem. It takes no more pickets to build over a hill than on a level. You can see from the above figure, that the number of pickets are the same by actual count. The curve lines represent the hill, and the lower lines the level ground. The dotted lines join the two, and they make the same fence over the hill, and are no farther apart than on the level.

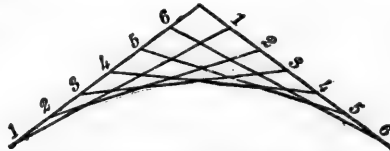


e feet

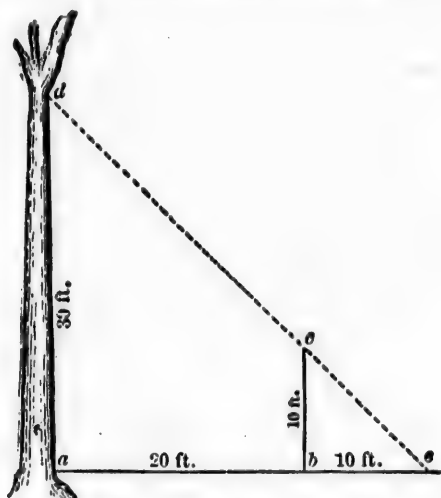
quare

han

er this
a hill
at the
curve
ound.
fence



Measure the width, and draw the figure as above. If the points in 1, 2, 3, 4, etc., are equal on both sides, the curve will be an exact part of a circle.



How to Find the Height of a Tree.

Suppose you desire a log 30 ft. long, measure off from the base of the tree 30 ft. (allow for the height of the stump), then measure ten feet back, and put your ten-foot pole at *b*, let some one hold it the height of the stump from the ground, then put your eye at *e*, looking over the top of the pole at *c*, and where the eye strikes the tree at *d*, will be 30 feet from *a*.

N B.—This rule will apply to any tree, or any height. The principles hold true in any case.

How to Find the Height by Measuring the Shadow.

RULE.—Measure a pole, and hold it perpendicular in the sun, and measure its shadow, then measure the shadow of the tree whose height is desired. Then multiply the length of the pole by the length of the tree's shadow, and divide the product by the length of the shadow of the pole, and the result will be the height of the tree.

Example:—If a pole 3 feet long casts a shadow $4\frac{1}{2}$ feet long, what is the height of a tree whose shadow measures 180 feet?

Solution:— $180 \times 3 \div 4\frac{1}{2} = 120$ feet, the height of the tree,



SHORT RULES OF ARITHMETIC.

In these short rules, which we have developed and compiled, our aim has been to make them superior to anything that has ever been published. We have endeavored to teach the how, and not the why. Our object is brevity and completeness. Business demands brief and practical rules. To every farmer, teacher, mechanic, merchant, lawyer and laborer, these rules will prove available and valuable knowledge.

How to Multiply by Eleven.

To multiply any two figures by 11, add two figures together and place their sum between the two figures of that number.

Example: $43 \times 11 = 473$, or 4, (4+3,) and 3. If the sum of the two figures exceed 9, the left-hand figure must be increased by 1. Thus $48 \times 11 = 528$.

Lightning Method of Multiplication and Division.

To multiply by 125, divide by 8, and call it thousands, because 125 is $\frac{1}{8}$ of a thousand.

To multiply by $12\frac{1}{2}$, divide by 8; call it hundreds.

To multiply by $1\frac{1}{4}$, divide by 8; call it tens.

To multiply by $62\frac{1}{2}$, divide by 16, and call it thousands.

To multiply by $6\frac{1}{4}$, divide by 16, and call it hundreds.

To multiply by $31\frac{1}{4}$, divide by 32, and call it thousands.

To multiply by $333\frac{1}{3}$, divide by 3, and call it thousands.

To multiply by $33\frac{1}{3}$, divide by 3, and call it hundreds.

To multiply by $3\frac{1}{3}$, divide by 3, and call it tens.

To multiply by 50, divide by 2, and call it hundreds.

To multiply by $66\frac{2}{3}$, divide by 15, and call it thousands.

To multiply by $833\frac{1}{3}$, divide by 15, and call it ten thousands, by annexing four ciphers.

To multiply by $83\frac{1}{3}$, divide by 12, and call it thousands.

To multiply by $8\frac{1}{3}$, divide by 12, and call it hundreds, because $8\frac{1}{3}$ is $\frac{1}{12}$ of a hundred. The reason is similar in each case.

To multiply by $166\frac{2}{3}$, divide by 6, and call it thousands.

To multiply by $16\frac{2}{3}$, divide by 6, and call it hundreds.

To multiply by $1\frac{2}{3}$, divide by 6, and call it tens.

To multiply by $37\frac{1}{2}$, take $\frac{3}{8}$ of the number, and call it hundreds; $87\frac{1}{2}$, $\frac{3}{8}$ of the number, and call it hundreds, etc.

We simply reverse these methods to divide. To divide by 10, 100, 1,000, etc., we remove the point one, two and three places to the left.

To divide by 25, remove the decimal point two places to the left, and multiply by 4.

Removing the point two places divides by one hundred; hence the quotient is 4 times too small; hence we remove the point two places, and multiply by 4.

To divide by $2\frac{1}{2}$, remove the point one place to the left, and multiply by 4.

To divide by 125, remove the point three places to the left, and multiply by 8.

To divide by $12\frac{1}{2}$, remove the point two places to the left, and multiply by 8.

To divide by $1\frac{1}{4}$, remove the point one point to the left, and multiply by 8. There are about $1\frac{1}{4}$ cubic feet in one bushel. Hence dividing the number of cubic feet by $1\frac{1}{4}$ gives the number of bushels nearly.

To divide by $133\frac{1}{3}$, remove the point three places to the left, and multiply by 3.

To divide by $8\frac{1}{3}$, remove the point two places to the left, and multiply by 12.

SHORT METHODS OF MULTIPLICATION.

To multiply any two figures by 11, add two figures together and place their sum between the two figures of that number. Example: $43 \times 11 = 473$, or 4, (4+3), and 3. If the sum of the two figures exceed 9, the left-hand figure must be increased by 1. Thus $48 \times 11 = 528$.

To divide any number by 5, multiply by 2 and cut off the right-hand figure. Example: $488 \div 5 = 488 \times 2 = 976$.

To divide any number by 25, multiply by 4 and cut off the two right-hand figures. Example: $324 \div 25 = 324 \times 4 = 1296$.

To divide any number by 125, multiply by 8 and cut off three figures from the right. Example: $6250 \div 125 = 6250 \times 8 = 50000$.

To multiply numbers of tens and units when tens or units are alike, multiply the units together, and if alike multiply the sum of the tens by the units and then the tens by the tens.

$$\begin{array}{r} \text{Example: } 64 \quad 4 \times 4 = 16 \quad \text{carried} \\ \quad \quad 34 = 6 + 3 = 9 \times 4 = 36 + 1 = 37 \\ \quad \quad \quad \text{carried} \\ 2176 \quad 3 \times 6 = 18 + 3 = 21 \end{array}$$

TO MULTIPLY BY 9's.

To multiply by 9, 99, or any number of 9's, annex as many ciphers to the multiplicand as there are 9's in the multiplier, and from the result subtract the multiplicand.

Example: Multiply 1,736 by 999 = 2,736,000

$$\begin{array}{r} 2,736 \\ \underline{2,736,264} \text{ Ans.} \end{array}$$

Weight and Value of Gold and Silver.

A ton of pure gold is valued at \$602,799.21. The weight of a million dollars in gold coin is 3,685.8 pounds.

A ton of pure silver is valued at \$37,704.84. The weight of a million dollars in silver coin is 58,929.9 pounds.

RULES IN MENSURATION.

To find the area of a rectangle.—Multiply the length by the breadth.

To find the contents of an irregular body.—Immerse the body in a vessel full of water, and measure the quantity of water displaced.

To find the area of a triangle.—Multiply the base by one-half the altitude. *Or:*—From half the sum of the three sides subtract each side separately; multiply together the half sum and the three remainders, and extract the square root of the product.

To find the diameter of a circle:—Divide the circumference by 3.14156; or multiply it by .318309.

To find the circumference of a circle:—Multiply the diameter by 3.14156, or 3 $\frac{1}{2}$.

To find the area of a circle:—Multiply half the diameter by half the circumference. *Or:*—Multiply the square of the diameter by .785398.

To find the side of a square equal to a given circle:—Multiply the diameter by .886227 or $\frac{1}{2}$ of $\sqrt{3.14156}$.

To find the diameter of a circle equal to a given square:—Multiply the side of the square by 1.12838.

To find the diameter of the three largest equal circles that can be inscribed in a given circle:—Divide the diameter of the given circle by 2.155.

To find the contents of a cube:—Multiply three sides together.

To find the surface of a cube:—Multiply the square of the length of one of the sides by 6.

To find the surface of a sphere:—Multiply the diameter by the circumference.

To find the solidity of a sphere:—Multiply the square of the diameter by 3.1416. *Or:*—Multiply the cube of the diameter by .5236.

To find the solidity of a cylinder:—Multiply the area of one end by the length.

How to Discount Bills and Invoices.

First deduct the trade or general discount from the amount of the bill, and from this remainder subtract the discount for cash.

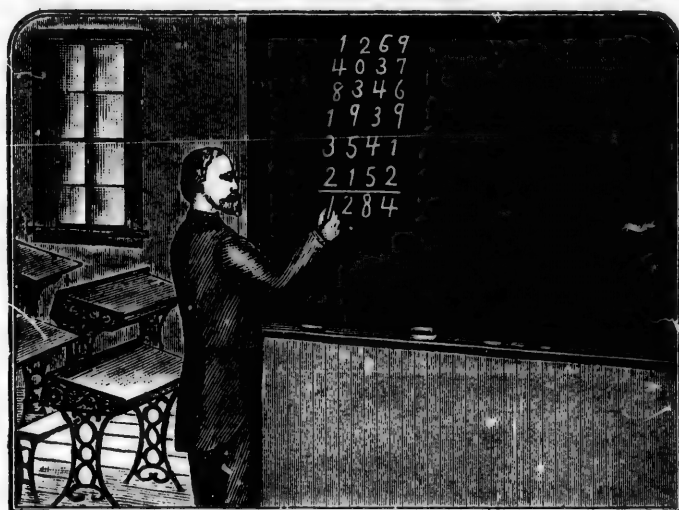
Example: What must be paid for a bill of goods amounting to \$200., with a discount of 25% and 10% off?

Solution: $\$200 \times 25\% = \50.00 trade discount.

$\$200 - 50 = \$150.$

$\$150 \times 10\% = \15.00 discount for cash.

$\$150 - \$15 = \$135.$ —Ans.



AN EASY WAY TO ADD.

This is a very simple and easy method, and will be a great help to those who find difficulty in adding long columns of figures correctly :

EXAMPLE:

⁴⁷ *Process.*—Begin at 9 to add as near 20 as you can, thus: $9 + 2 + 4 + 3 = 18$, reject the tens and place the 8 to the right of the 3, as in example; begin at 6 and add $6 + 8 + 4 = 18$, reject the tens, as before, and place 8 to the right of 4, as in example; ⁴⁷ begin at $6 + 7 + 4 = 17$, reject tens, place 7 to the right of 4, as in example; then $9 + 4 + 3 = 16$, reject tens, place 6 to the right of 3; then $6 + 7 + 4 = 17$, reject tens, and place 7 to the right, as before; having arrived at the top of the column, ⁶ add the figures in the new column, thus: $8 + 8 + 7 + 6 + 7 = 36$, or 3 tens and 6 units; place the 6 units as the unit's figure of the sum, having 3 tens to carry to 5 tens, the number of integers or catch figures already rejected. ³ $3 + 5 = 8$ tens, which pre-⁸⁶ fixed with the 6, makes 86 the sum.

N. B.—Two or more columns may be added in the same way by using a lead pencil, and then erasing the figures used after the addition is completed.

ADDITION.

Lightning Method

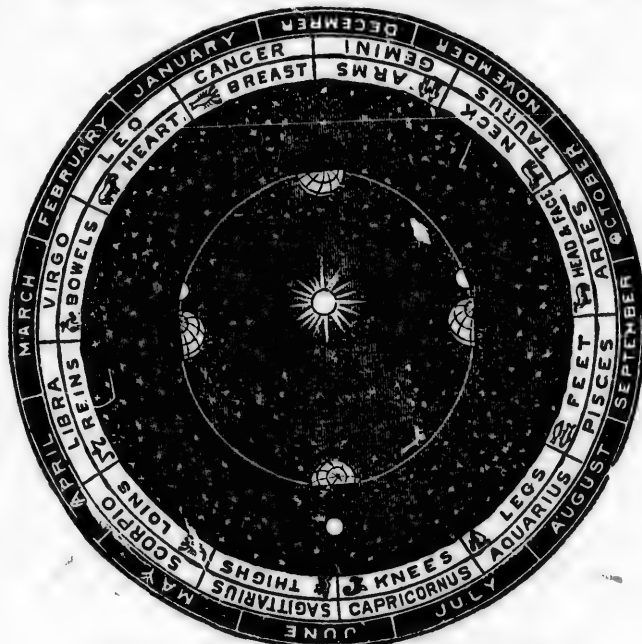
$$\begin{array}{r}
 7857689 \\
 5431074 \\
 4568925 \\
 4832650 \\
 3755542 \\
 5203759 \\
 \hline
 639
 \end{array}$$

"Lightning addition" lies in the ability to see and take in the result of two or more figures without stopping to add each figure separately, i. e., to read results in figures as in reading a book, the meaning of the word or sentence is known without spelling out each syllable or word.

Process : Commence at the bottom at the right and add thus in the above example : 11, 18, 29 ; then carry the 2 tens to the second column ; then add, 7, 16, 25, 33 ; carry the 3 hundreds to the third column and add the same way ; 10, 21, 30, 36, etc., etc.

Never allow yourself to add up a column in this manner : 9 and 2 are 11 and 5 are 16 and 4 are 20 and 9 are 29. It is just as easy to name the results of two or more figures at once, and five times as rapid.

Practice adding columns of figures fifteen minutes each day for six months, and you will become an expert in addition.



HOW TO FIND THE DAY OF THE WEEK FOR ANY DATE.

RULE.—Take the last two figures of the given year and add one-fourth of itself to it; add also to this the day of the month and the ratio of the month and divide the sum by 7, and the remainder will be the day of the week, 1 denoting Sunday, 2 Monday, 3 Tuesday, and so on.

Ratio: For Feb., March and Nov. is 6; for Sept. and Dec. 1; for April and July 2; for May 4; for Jan. and Oct. 3; for Aug. 5, and for June 0.

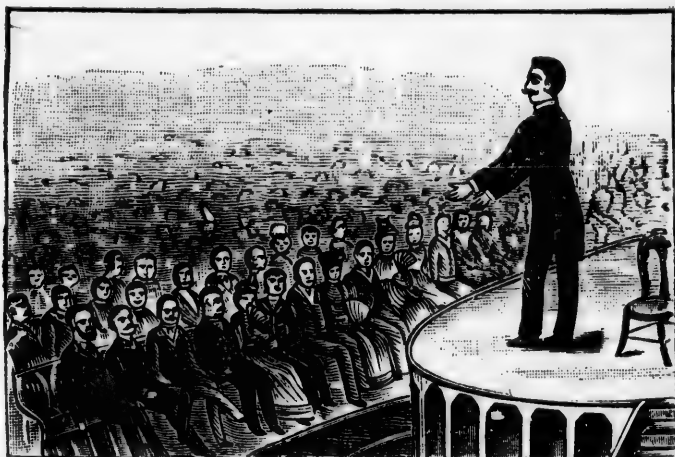
Example: On what day of the week was John born if the date was Sept. 16, 1841?

Last 2 figures 41 of the year
Solution: $41 \div 4 = 10$
Day of the month 16
Ratio 1
Total 68

$68 \div 7 = 9$ with 5 remainder.

Hence John was born on the 5th day of the week or Thursday.

N. B. The above rule is for the present century, for the last century add 2 before dividing by 7, and for the next century subtract 2 before dividing by 7.



**A Complete Set of Parliamentary Rules and Usages
for Public Meetings, Political Gatherings
and Debating Societies.**

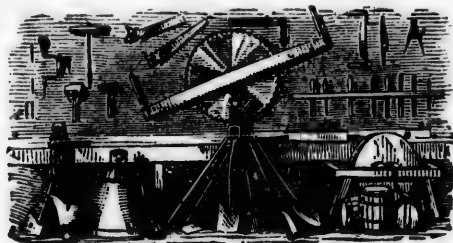
OVER THREE HUNDRED POINTS OF ORDER.

Trace up each reference at the right, and then look up the corresponding marks on opposite page, which will give the full information desired.

Forms in which questions may be put.....	13 14 15 16 17 18 19
Questions of precedence of questions.....	5 6 7 8 9 10 12
Motion to withdraw a motion.....	1 a * A a II x
To take up a question out of its proper order.....	1 a * A b II x
Motion to take from the table.....	1 a * C b II x
Motion to suspend the rules.....	3 a † B a II x
To substitute in the nature of an amendment.....	3 a † A a II x
Motion to make subject a special order.....	3 a † A b II x
Question whether subject shall be discussed.....	1 a * A b III y
Motion that committee do not rise.....	1 a * B a II x
Motion to refer a question.....	3 b † B a II x
Motion to reconsider an undebatable question.....	1 a * B a II x
Motion to reconsider a debatable question.....	3 b * B a II x
Reading papers.....	1 a * A a II x
Questions of privilege.....	3 a † A a II x
Questions touching priority of business.....	1 a † A a II x
Motion for previous question.....	1 a * A b II x
Motion to postpone indefinitely.....	3 b * A a II x
Motion to postpone to a definite time.....	4 a † A a II x

Motion for the orders of the day.....	1 a * A a III y
Objection to consideration of question.....	1 a * A b III y
Motion to limit debate on question.....	1 a † A b II x
Motion to lay on the table.....	1 a * C a II x
Leave to continue speaking after indecorum.....	1 a * A a II x
Motion to extend limits of debate on question.....	1 a † A a II x
Motion to commit.....	3 b † A a II x
Motion to close debate on question.....	1 a † A b II x
Call to order.....	1 a * A a III y
Motion to appeal from Speaker's decision generally.....	3 a * A a II y
Motion to appeal from Speaker's decision <i>re</i> indecorum.....	1 a † A a II y
Motion to amend the rules.....	3 a † A b II x
Motion to amend an amendment	3 a * A a II x
Motion to amend	3 a † A a II x
Motion to determine time to which to adjourn.....	2 a † A a II x
Motion to adjourn.. ..	1 a * B a II x

1. Question undebatable; sometimes remarks tacitly allowed.
2. Undebatable if another question is before the assembly.
3. Debatable question.
4. Limited debate only on propriety of postponement.
 - a. Does not allow reference to main question.
 - b. Opens the main question to debate.
- *. Cannot be amended.
- †. May be amended.
 - A. Can be reconsidered.
 - B. Cannot be reconsidered.
 - C. An affirmative vote on this question cannot be reconsidered.
- b. Requires two-third vote, unless special rules have been enacted.
 - a. Simple majority suffices to determine the question.
- II. Motion must be seconded.
- III. Does not require to be seconded.
 - x. Not in order when another has the floor.
 - y. Always in order though another may have the floor.
 - z. May be moved and entered on the record when another has the floor, but the business then before the assembly may not be put aside. The motion must be made by one who voted with the prevailing side, and on the same day the original vote was taken.
5. Fixing the time to which an adjournment may be made; ranks first.
6. To adjourn without limitation; second.
7. Motion for the Orders of the Day; third.
8. Motion to lay on the table; fourth.
9. Motion for the previous question; fifth.
10. Motion to postpone definitely; sixth.
12. Motion to commit; seventh.
13. Motion to amend; eighth.
14. Motion to postpone indefinitely; ninth.
15. On motion to strike out words, "Shall the words stand part of the motion?" unless a majority sustains the words they are struck out.
16. On motion for previous question the form to be observed is: "Shall the main question be now put?" This, if carried, ends debate.
17. On an appeal from the chair's decision, "Shall the decision be sustained as the ruling of the house?" The chair is generally sustained.
18. On motion for Orders of the Day, "Will the house now proceed to the Orders of the day?" This, if carried, supersedes intervening motions.
19. When an objection is raised to considering question, "Shall the question be considered?" objection may be made by any member before debate has commenced, but not subsequently.



How to Write Your Name on Iron Tools.

1. Melt a little beeswax or hard tallow and pour it on the iron at the place intended to be marked. After the wax or tallow cools take an awl or sharp piece of iron and write your name in it.
2. Pour a little nitric acid on the wax, where you have written your name, and allow it to remain a few moments. Then wipe off the wax, and your name remains indelibly marked as written in the wax.
3. Be careful and allow none of the acid to come in contact with your clothes or hands.



How to Write Your Name on Glass.

1. Apply beeswax and write your name as in the above.
2. Then instead of nitric acid, apply hydrofluoric acid, and your name will remain permanently written on the clear surface of the glass.

ABBREVIATIONS.

Relating to Law and Government.

Administrator.....	Admr.	His (Her) Majesty.....	H. M.
Advocate.....	Adv.	His (Her) Roy. Highness.....	H. R. H.
Attorney.....	Atty.	House of Representatives.....	H. R.
Against (<i>versus</i>).....	V. or vs.	Justice of the Peace.....	J. P.
Alderman.....	Ald.	Legislature.....	Leg.
Assistant.....	Asst.	Member of Congress.....	M. C.
And others (<i>et alii</i>).....	et al.	Non prosecutor (he does not prosecute).....	Non pros.
Clerk.....	Clk.	Member of Parliament.....	M. P.
Commissioner.....	Com.	Notary Public.....	N. P.
Committee.....	Com.	Parliament.....	Parl.
Common Pleas.....	C. P.	Plaintiff.....	pliff.
Congress.....	Cong.	Post-Office.....	P. O.
Constable.....	Const.	Post-Master.....	P. M.
County Court.....	C. C.	Public Document.....	Pub. Doc.
Co. Commissioner (or Clk).....	C. C.	Queen Victoria (<i>Victoria</i> <i>Regina</i>).....	V. R.
Court of Common Pleas.....	C. C. P.	Right Honorable.....	Rt. Hon.
Court of Sessions.....	C. S.	Republic, Republican.....	Rep.
Defendant.....	Deft., Dft.	Solicitor.....	Sol.
Deputy.....	Dep.	Superintendent.....	Supt.
Department.....	Dep.	Surveyor General.....	Surv. Gen.
District Attorney.....	Dist. Atty.		
His (Her) Brit. Majesty.....	H. B. M.		

Ecclesiastical.

By God's Grace (<i>Dei gratia</i>).....	D. G.	Methodist Episcopal.....	M. E.
Church, churches.....	Ch., chs.	Protestant.....	Prot.
Clergyman.....	Cl.	Protestant Episcopal.....	P. E.
Deacon.....	Dea.	Presbyterian.....	Presb.
Jesus the Saviour of Men (<i>Jesus</i> <i>hominum Salvator</i>).....	I. H. S.	Reformed, Reformation.....	Ref.
Jesus of Nazareth, King of the Jews (<i>Jesus Nazareus Rex</i> <i>Judeorum</i>).....	I. N. R. I.	Roman Catholic.....	Rom. Cath.
Methodist.....	Meth.	God Willing (<i>Deo Volente</i>).....	D. V.
		Episcopal.....	Epis.
		Evangelical.....	Evang.
		Ecclesiastical.....	ecc., eccl.

Educational and Professional.

Doctor of Divinity.....	D. D.	Laureate of English Litera- ture.....	L. E. L.
Bachelor of Laws.....	LL. B.	Bachelor of Music.....	M. B.
Master of Laws.....	M. L.	Doctor of Music.....	D. M.
Doctor of Laws.....	LL. D.	Doctor of Philosophy.....	Ph. D.
Doctor of Medicine.....	M. D.	Bachelor of Philosophy.....	Ph. D.
Bachelor of Arts.....	A. B.	Bachelor of Science.....	B. S.
Master of Arts.....	A. M.	Master of Science.....	M. S.
Poet Laureate.....	P. L.	Doctor of Science.....	S. D.
Fellow of the American } Academy.....	A. A. S.	Civil Engineer.....	C. E.

BUSINESS ABBREVIATIONS.

<i>Acct</i>	Account.	<i>Inv</i>	Inventory.
<i>Advtg</i>	Advertising.	<i>J. or Jour</i>	Journal.
<i>Agmt</i>	Agreement.	<i>J. P.</i>	Journal page.
<i>Agt</i>	Agent.	<i>L. B.</i>	Letter Book.
<i>Am</i>	Amount.	<i>lbs</i>	Pounds.
<i>Art</i>	Article.	<i>L. F.</i>	Ledger Folio.
<i>B. or Bk</i>	Bank.	<i>Mdse</i>	Merchandise.
<i>Bal</i>	Balance.	<i>Mem. or memo</i>	Memorandum.
<i>Bbl</i>	Barrel.	<i>Mols</i>	Molasses.
<i>B. B.</i>	Bill-book or Bank-book.	<i>Nat</i>	National.
<i>B. Ex</i>	Bill of Exchange.	<i>N. B.</i>	(Nota Bene) Take Notice.
<i>B. P. or Bills Pay</i>	Bills Payable.	<i>Net</i>	Without deduc- tion.
<i>B. R. or Bills Rec</i>	Bills Receivable.	<i>O. I. B.</i>	Outward Invoice
<i>Bo't</i>	Bought.	<i>P. or p.</i>	Page. [Book.
<i>Bush</i>	Bushel.	<i>Payt</i>	Payment.
<i>C. or C't</i>	Cent.	<i>Pd</i>	Paid.
<i>Cash</i>	Cashier.	<i>Pkg</i>	Package.
<i>C. B.</i>	Cash Book	<i>Per. or pr</i>	By the.
<i>Cer</i>	Certificate.	<i>per ct</i>	(Per centum) By the hundred.
<i>Chgd</i>	Charged.	<i>P. & L</i>	Profit and Loss.
<i>Ck</i>	Check.	<i>Pr</i>	Pair.
<i>Co</i>	Company. [ery.	<i>Prem</i>	Premium.
<i>C. O. D.</i>	Collect on Deliv-	<i>prox</i>	(Proximo) The next month.
<i>Com</i>	Commission.	<i>Ps</i>	Piece or Pieces.
<i>Con. or Const</i>	Consignment.	<i>P. C. B.</i>	Petty Cash Book.
<i>Cr</i>	Creditor.	<i>Recd</i>	Received.
<i>Cwt</i>	Hundred weight.	<i>R. R.</i>	Railroad.
<i>D. B.</i>	Day Book.	<i>S. B.</i>	Sales Book.
<i>Dep. B.</i>	Deposit Book.	<i>S. S.</i>	Steamship.
<i>Dft</i>	Draft.	<i>Ship</i>	Shipment.
<i>Dis</i>	Discount.	<i>St. Dft</i>	Sight Draft.
<i>Do. or do</i>	(Ditto) The same.	<i>Stg</i>	Sterling.
<i>Doz</i>	Dozen.	<i>Sunds</i>	Sundries.
<i>Dr</i>	Debtor.	<i>Tr. or Trans</i>	Transaction.
<i>ds. or ds</i>	Days	<i>ult</i>	(Ultimo) The last month.
<i>ea</i>	Each.	<i>viz</i>	(Videlicet) To wit; namely.
<i>E. E.</i>	Errors excepted.	<i>vs</i>	(Versus) Against.
<i>E. & O. E.</i>	Errors and omis- sions excepted.	<i>Yds</i>	Yards.
<i>Ex. or Exch</i>	Exchange.	<i>\$</i>	Dollar.
<i>Exp</i>	Expense.	<i>¢</i>	Cents.
<i>fav</i>	Favor.	<i>£</i>	Pounds Sterling.
<i>F. B. E.</i>	Foreign Bill of Exchange.	<i>d.</i>	Pence.
<i>For'd</i>	Forward.	<i>@</i>	At, or to.
<i>Frt</i>	Freight.	<i>%</i>	Per cent.
<i>Ft. or ft.</i>	Foot or Feet.	<i>a/c</i>	Account.
<i>Gal</i>	Gallon.	".....	(Ditto) The same.
<i>Guar</i>	Guarantee.	<i>#</i>	Number.
<i>Hdkf</i>	Handkerchief.	<i>✓</i>	Check Mark.
<i>Hhd</i>	Hogshead.	<i>11</i>	One and 1 fourth.
<i>Hund</i>	Hundred.	<i>12</i>	One and 2 fourths.
<i>I. or Inv</i>	Invoice.	<i>13</i>	One and 3 fourths.
<i>I. B.</i>	Invoice Book.		
<i>Ins</i>	Insurance.		
<i>inst</i>	(Instant) The present month.		
<i>Insol</i>	Insolvency.		
<i>Int</i>	Interest.		

BUSINESS DICTIONARY.

- Abatement.**—A discount allowed for damage or overcharge, or for the payment of a bill before it is due.
- Acceptance.**—An assent and engagement to pay a bill or draft when due.
- Acceptance for Honor.**—An acceptance made after a bill has been protested for non-acceptance, for the honor of the drawer or any indorser.
- Accommodation Paper.**—A bill or note to which a party has put his name to accommodate another, who is to provide payment when due.
- Account.**—A written or printed statement of debits and credits in any business transaction.
- Account Current.**—A detailed statement of the transactions between parties for a certain period, showing the condition of affairs at the current or present time.
- Account Sales.**—A detailed statement of a commission merchant to his principal, showing his sales, the expenses attending the same, and the *net proceeds*.
- Accountant.**—A person trained to keep accounts.
- Accrued.**—Increase, or interest due and unpaid.
- Actionaire.**—The owner of shares in a stock company, a stockholder.
- Actuary.**—A registrar or clerk. Generally applied to the manager of a life insurance company.
- Administrator.**—A person appointed to settle the estate of a testator, or to manage an intestate estate.
- Admiralty.**—The power that controls naval affairs in Great Britain.
- Courts of Admiralty.**—A court which decides questions of maritime justice.
- Adulteration.**—The debasing of an article or substance by spurious or less valuable admixture.
- Ad valorem.**—According to value.
- Advance.**—A rise in price, additional profits, stocks above par.
- Adventure.**—Goods sent to sea at the owner's risk, a speculation.
- Adventure in Co.**—Goods sent to be sold on joint account of shippers and consignee.
- Advice.**—Admonition, or suggestions offered, usually in regard to buying and selling goods.
- Affidavit.**—A written statement made upon oath.
- Afreight.**—To hire, as a ship, for transporting freight.
- Agent.**—One intrusted with the business of another, a deputy of factor.
- Agio.**—A term used to denote the difference between the real and nominal value of money.
- Allonge.**—A paper attached to a bill of exchange when there are too many endorsements to be contained on the bill itself.
- Allowance.**—A deduction made, for instance, from the gross weight of goods.
- Ambassador.**—A minister employed by one government to represent it at the court of another.
- Anker.**—A common liquid measure, varying, in different European countries, from nine to ten gallons.
- Antal.**—A wine measure of Hungary, holding about thirteen and a half gallons.
- Anticipate.**—To be before in doing, or pay before due.
- Appraise.**—To set a value on goods or property.
- Appurtenance.**—Adjunct or appendage.
- Arbitration.**—The hearing and decision of a cause between parties in controversy, by chosen persons.
- Arbitration of Exchange.**—The deduction of a proportional or *arbitrated rate* of exchange between two places through an intermediate place, to ascertain the most advantageous method of drawing or remitting.
- Arrear.**—That which remains unpaid though due.
- Assay.**—To subject an ore to chemical examination to find the amount of any metal contained in it.
- Assess.**—To fix a certain value for the purpose of taxation.
- Assets.**—The entire property of an individual or company.
- Assignee.**—One to whom something is assigned, usually one who receives property to dispose of for the benefit of creditors.

- Assignor.**—One who assigns an interest to another.
- Assignment.**—Placing property in the hands of assignees.
- Association.**—The union of a number of persons for some special aim.
- Assume.**—To take on another's debts.
- Attachment.**—A seizure by virtue of a legal process.
- Attest.**—To bear witness, to certify.
- Attorney (Power of).**—A written authority from one person empowering another to act for him.
- Attorney in Fact.**—An agent with full power.
- Auctioneer.**—One who sells goods at a public sale.
- Auditor.**—A person appointed to examine and settle accounts.
- Avails.**—Profits of property disposed of, proceeds of goods sold.
- Average.**—A proportional share of a general loss, also, a mean time of payment for several debts due at different times.
- Avoirdupois.**—Commercial standard of weight in United States and England.
- Bail.**—The security given for releasing a person from custody.
- Bailee.**—The person to whom goods are intrusted.
- Bailor.**—One who intrusts goods to another.
- Bailment.**—A delivery of goods in trust.
- Balance.**—The excess on one side; or what added to the other makes equality in an account.
- Balance Sheet.**—A statement in condensed form showing the condition and progress of business.
- Ballast.**—Any heavy material placed in the hold of a ship to steady it in the water.
- Ballot.**—A Swedish term signifying ten reams of paper; used also to designate a small bale or package.
- Balsa.**—A kind of float or raft used on the coast of South America for landing goods through a heavy surf.
- Banco.**—A commercial term used in Hamburg to distinguish bank money from common currency.
- Banking.**—The business of a banker, or pertaining to a bank.
- Bankrupt.**—An insolvent, one who is unable to pay his debts.
- Bank Stock.**—Shares in the capital stock of a bank.
- Barratry.**—An intentional breach of trust, particularly any fraud by the master of a ship.
- Barque.**—A three masted vessel carrying no square sails on her mizzen mast.
- Bazaar.**—A word of Eastern usage, signifying a place of exchange or general market-place, a repository of fancy articles—especially of dress.
- Beacon.**—A signal or light for the guidance of mariners; usually erected and sustained by the government.
- Bidder.**—One who bids or offers a price.
- Bill.**—A name given to statements in writing; as goods; a note; a draft; a law not enacted; exhibition of charges.
- Bill of Exchange.**—A bill ordering one party to pay another a certain sum of money.
- Bill of Lading.**—Written statement of goods shipped with terms of delivery.
- Bill of Parcels.**—A detailed account of goods sold.
- Bill of Sale.**—A formal instrument for the transfer of goods and chattels.
- Board of Trade.**—An association of business men for the advancement of commercial interests.
- Bona Fide.**—In good faith, in reality.
- Bond.**—A writing, under seal, binding a person and his heirs to fulfill certain obligations.
- Bonded Goods.**—Goods in charge of the officers of customs for the duties on which bonds are given at the custom house.
- Bonus.**—A premium, or extra sum paid for a loan, a charter, or other privilege.
- Book-Debt.**—An entry or charge on a ledger; called also an open account, in contradistinction to a written promise or note.
- Breakage.**—An allowance made by the shipper or seller on certain descriptions of fragile goods.
- Bottomry.**—A contract by which the owner of a ship pledges it as security for money loaned him.
- Bottomry Bond.**—A bond given upon a ship to secure the repayment of money borrowed.

Broker.—A person who transacts business for another, commonly in stocks, money, etc., using the name of his principal.

Brokerage.—The fee charged, for transacting business, by a broker.

Bulls and Bears.—Persons engaged in the gambling transactions of the stock exchange. The bulls are personally interested in *raising up* the prices of certain goods, while the bears are fighting to *pull down* prices.

Bullion.—A commercial name for uncoined gold or silver.

Capital.—The stock employed in trade; the fruit of past labors; saved.

Carat.—An imaginary weight that expresses the fineness of gold.

Cargo.—A ship's lading, or freight.

Cashier.—One who has charge of money and superintends the receipts and payments.

Centage.—A rate by the hundred.

Certified Check.—A check which has been certified by the bank on which it is drawn, making the bank absolutely responsible for its payment.

Chancellor.—The chief judge of a court of chancery or equity.

Charter.—An instrument in writing from the sovereign power, or legislature, conferring certain rights and privileges.

Charter Party.—A written agreement by which a ship is hired under specified conditions.

Choses in Action.—Things of which the owner has not possession, but merely the right of legal action for possession, as notes, accounts, etc.

Choses in Possession.—Things in possession of the owner.

Circulating Medium.—Cash and bank notes payable on demand; the medium of exchange.

Clearance.—Permission from the custom house officer for a ship to sail.

Clearing House.—A kind of banking exchange for the convenience of daily settlements between banks.

Clerical Error.—An error in calculation or other accidental error on books or documents.

Coasting.—Sailing near land, or vessels trading between ports of the same country.

Codicil.—A supplement to a will.

Collaterals.—Pledges or security for loans of money, or other indebtedness.

Commerce.—The exchange of merchandise on a large scale.

Commercial Paper.—Bills of exchange, drafts or promissory notes given in the course of trade.

Common Law.—The unwritten law receiving its force from universal reception, as distinguished from statute law.

Commission.—The brokerage or allowance made to an agent or factor for doing business for another.

Cooperage.—Charges for putting hoops on casks or barrels.

Compact.—A covenant or contract between different parties.

Company.—A number joined together to undertake some common enterprise.

Compound.—To adjust by agreement differently from the original terms, to settle by compromise.

Compromise.—A friendly settlement of differences by mutual concessions.

Consignment.—The act of consigning, as a charge for safe keeping and management, as goods, property, etc.

Consignee.—One to whom goods are intrusted.

Consignor.—The person who commits goods to another.

Consols.—In England three per cent. annuities granted at different times, and consolidated into one stock or fund.

Consul.—A person commissioned to reside in a foreign country as an agent of the government.

Contraband.—Prohibited merchandise or traffic.

Contract.—To make an agreement, to covenant.

Copartnership.—A joint interest in business.

Counterfeit.—To copy or imitate without authority, with a view to defraud; a forgery.

Countersign.—To sign in addition to the name of a superior, that of the secretary or subordinate officer, as bank notes are signed by the president and countersigned by the cashier.

Coupon.—An interest warrant printed at the end of bonds, to be cut off when the interest is paid.

- Court.**—An official assembly legally met together for the transaction of judicial business.
- Covenant.**—A formal contract between two or more parties.
- Coverture.**—The condition of a married woman, being considered as under the shelter and protection of her husband.
- Credentials.**—Testimonials, or certificates showing that a person is entitled to credit, authority or official powers.
- Credit.**—Trust given or received; mercantile reputation entitling one to be trusted; also the side of an account on which payment is entered.
- Creditor.**—One to whom money is due.
- Credit Mobilier.**—A name given to a joint-stock company in Paris, established in 1852, with exceptional charter privileges. The term has become familiar to intelligent persons in this country through the congressional investigation of the credit Mobilier company of the Pacific Railroad.
- Curb-Stone Brokers.**—A term applied to a class of stock operators in New York who do business on the sidewalk or pavement.
- Currency.**—That which circulates as a representative of value.
- Customs.**—Customary toll, tax, or tribute on imported or exported goods.
- Custom House.**—A building where duties are paid and vessels entered and cleared.
- Damages.**—A compensation to one party for a wrong done him by another, the estimated reparation in money for the injury.
- Days of Grace.**—Days granted for delay in the payment of a note, usually three after it is due.
- Debase.**—To lessen in value by adulteration.
- Debenture.**—A certificate given by the collector of the port of entry, to an importer for drawback of duties on imported merchandise, duties on which when the merchandise is exported, are to be refunded.
- Debit.**—A recorded item of debt, the debtor side of an account.
- Debt.**—That which is due from one person to another.
- Debtor.**—The person who owes another either money, goods, or services.
- Decimal.**—Having a tenfold increase or decrease, *Decimal Fractions*. Having any power of ten for a denominator.
- Deed.**—A sealed instrument in writing used to transfer property.
- Defalcation.**—A diminution, deficit.
- Defaulter.**—One who fails to discharge a public duty, as to account for money entrusted to him.
- Deficit.**—A deficiency; the difference between an account's statement of the assets and the assets themselves.
- Del Credere.**—A commercial term implying a guarantee of the solvency of the purchaser.
- Delivery.**—Giving money or goods to another.
- Demand.**—A peremptory urging of a claim, an exaction.
- Demise.**—To convey, to bequeath by will.
- Demurrage.**—Allowance for detention of a ship.
- Depository.**—A trustee, one to whom something is committed for safe keeping.
- Deputy.**—One appointed to act for another, a representative or delegate.
- Diplomacy.**—The science of conducting negotiations between nations.
- Discount.**—An allowance or deduction made for the payment of money before it is due.
- Discount Days.**—The days of the week on which the directors of a bank meet to consider paper offered for discount.
- Dividend.**—A percentage of profits paid to stockholders.
- Donee.**—The person to whom a gift or donation is made.
- Donor.**—One who confers anything gratuitously.
- Dormant.**—Silent partner, one who takes no share in the active business, but shares profit.
- Drawback.**—Money paid back on goods exported, a part or the whole of the duty charged.
- Draft.**—An order from one man to another directing the payment of money, a bill of exchange.
- Drawee.**—The person to whom a bill of exchange is addressed, the payer.

Drawer.—One who draws a bill of exchange, or an order for payment.

Dress Goods.—A term applied to fabrics for the garments of women and children, most commonly to those made of mixed materials, as silk and cotton, and silk and worsted, etc.

Due-Bill.—A written acknowledgment of debt; not transferable by mere endorsement.

Dun.—To press urgently the payment of a debt.

Duplicate.—A copy or counterpart of anything.

Duress.—Personal restraint or fear of personal injury or imprisonment; it nullifies all contracts into which it enters.

Duties.—A tax levied by the government on imported goods; money paid to the government on imports and exports.

Earnest.—A pledge, something given by the buyer to the seller to bind the bargain and prove the sale.

Effects.—Goods or personal estate.

Eleemosynary.—Founded by charity, or intended for the distribution of charity, as a hospital or college.

Ell.—An English measure of length equal to $1\frac{1}{4}$ yards; the Scotch ell is $1\frac{1}{100}$ yards.

Embargo.—A detention of vessels in port, prohibition from sailing.

Embarrassment.—Perplexity arising from insolvency or temporary inability to discharge debts.

Embassy.—The public business intrusted to diplomatic officers.

Engrosser.—One who buys large quantities of any goods in order to control the market.

Embezzlement.—To appropriate public money to private use by a breach of trust.

Emporium.—A place of extensive commerce, a market place.

Endorse.—To endorse a note by writing the name on the back.

Entrepot.—A bonded warehouse; a storeroom for the deposit of goods; a free port.

Equity.—A system supplemental to law, qualifying or correcting it in extreme cases.

Estate.—The degree, quantity, nature, and extent of interest which a person has in real property.

Estoppel.—A stop, a bar to one's alleging or denying a fact contrary to his own previous actions, allegation or denial.

Exchange.—Act of bartering; a bill drawn for money; a place where merchants meet; difference between the value of money in two places, or premium and discount arising from purchase and sale of goods.

Excise.—Taxes or duties on articles produced and consumed at home; internal revenue tax.

Executor.—The person appointed by a testator to execute his will.

Executory.—To be executed in the future.

Exports.—That which is carried out of a country, as goods and produce in traffic.

Express.—A courier; also regular and quick conveyance for packages, etc.

Face.—The amount expressed on a note or draft.

Factor.—An agent who buys and sells in his own name, being intrusted with the goods, in this respect differing from a broker.

Facture.—An invoice, or bill of parcels.

Failure.—Becoming bankrupt, suspension of payment.

Fac-simile.—An exact copy or likeness.

Favor.—A note or draft is said to be in favor of the payee.

Fee Simple.—In the United States, an estate held by a person in his own right and descendible to his heirs.

Finance.—Revenue, public money, income.

Financier.—One skilled in financial operations, a treasurer.

Firm.—A business house or company; the title used by a business house.

Firkin.—A measure of capacity; the fourth part of a barrel; or eight or nine gallons.

Fiscal.—Pertaining to the public treasury or revenue.

Fixtures.—The part of the furniture of a store or office which is not movable, as gas pipes and burners, partitions, etc.

F. o. b.—Free on board; the bill or invoice with f. o. b. includes the transportation to the shipping port and all the shipping expenses.

Foreclose.—To cut off by a court judgment from the power of redeeming mortgaged property.

Forestall.—To buy goods on its way to market, intending to sell again at a higher price.

Folio.—A page in an account book, sometimes two opposite pages bearing the same serial number.

Franc.—A silver coin used in France, equal to about nineteen cents.

Frank.—To exempt from charge for postage.

Fraud.—Injurious stratagem, deceit.

Free Trade.—The policy of conducting international commerce without duties.

Freehold.—Land held by free tenure, or in fee simple, subject to no superior or conditions.

Freight.—Merchandise being moved from one place to another; the price paid for carrying freight; also to load or burden.

Funded.—Turned into a permanent loan on which annual interest is paid.

Funds.—The supply of money or the capital.

G

Gain.—Advantage, acquisition, accumulation, profit.

Garbled.—Drugs, spices or other goods which have been sorted or picked over and freed from impurities.

Gauging.—Measuring the capacity of casks, etc.

Gist.—The principal point of a question, the pith of the matter.

Go-between.—Agent for both parties.

Grant.—A transfer of property by deed; a conveyance made by the Government.

Gross.—Twelve dozen; *gross weight*; weight of goods including dust, dross, bag, cask, etc.

Guarantee (or Guaranty).—A security or warranty given by a third party; one who warrants.

Guarantor.—A warrantor; a surety.

H

Hebeas Corpus.—A writ to bring a party before a court, to prevent false imprisonment.

Haberdasher.—A seller of small wares, as thread, pins, etc.

Hand-book.—A book of reference; a manual.

Hand-money.—Money paid by the purchaser at the closing of a contract or sale.

Harbor.—A port or haven for ships.

Haven.—A port or shelter for ships; a harbor.

Hazardous.—Precarious, dangerous, uncertain.

High Seas.—The uninclosed waters of the ocean outside the boundaries of any country.

Hollow-ware.—A trade name for camp and kitchen utensils made of cast iron or wrought iron.

Honor.—To accept and pay when due.

Husbandage.—An owner's or an agent's commission for attending to a ship.

Hypothecate.—To pledge for the security of a creditor.

Impolite.—Wanting in prudent management; not politic.

Import.—To bring in from abroad.

Importer.—The merchant who imports goods.

Imposition.—Tax, toll, duty or excise prescribed by authority.

Impost.—A tax or duty imposed on imported goods.

Indemnify.—To recompense for loss, to reimburse.

Indenture.—A mutual agreement in writing.

Indorsement.—A writing on the back of a note.

Indulgence.—Extension of time of payment; forbearing to press for payment.

Inland Bills.—Draft of bills of exchange drawn on a party in the same State as the drawer.

Insolvency.—Inability to discharge debts when due.

Insurance.—Indemnity from loss; the premium paid.

Installment.—Payment of parts at different times.

Interest.—Premium paid for the use of money.

Internal Revenue.—The part of the revenue of our Government which is collected in the form of internal duties.

Intestate.—Without a will; not disposed of by will.

Inventory.—A list of merchandise made periodically for the purpose of knowing the quantity and value of unsold good, in order to ascertain the condition of business.

Investment.—The laying out of money in the purchase of some species of property.

In oice.—A written account or bill of merchandise bought; a bill of items.

J

Jettison.—Throwing goods overboard in case of peril to lighten and preserve the vessel.

Jointure.—An estate settled on a wife at the husband's death, for her life at least.

Joint Stock.—Stock held in company.

Joint Tenancy.—Joint occupancy; not so close intimacy as partnership.

Journal.—A book used to classify and arrange business transactions.

Judgment Note.—A note in the usual form, with the addition of the power to confer judgment if not paid.

Jurisdiction.—The power of exercising judicial authority.

K

Kilogram.—The French measure of weight equal to $2\frac{1}{2}$ lbs. avoirdupois, or 1000 grains.

Kiting or Kite flying.—Exchanging checks on different banks, for the purpose of obtaining the use of money for a single day.

L

Lame Duck.—A stock broker's term for one who fails to meet his engagements.

Larceny.—Theft; taking personal property belonging to another.

Law-merchant.—The general body of commercial usages in matters relative to commerce.

Lay-days.—Days allowed for loading and unloading a cargo.

Laydown.—A phrase used to express the entire cost of a commodity, including transportation, etc., at a place remote from its production or purchase.

Lease.—Renting lands, etc.; the written contract.

Legacy.—A gift, by will, of personal property.

Ledger.—A book in which a summary of accounts is preserved.

Lessee.—One who takes an estate by lease.

Letter of Attorney.—A writing by which one person authorizes another to act in his stead, commonly called power of attorney.

Letters of Credit.—A letter authorizing credit to a certain amount to be given to the bearer.

Liability.—Obligation; debts.

License.—A grant of permission by the authorities.

Lien.—A legal claim on property for debt.

Lieu.—Instead; in place of.

Liquidate.—To clear off; to settle; to pay as debts.

Lloyd's.—A marine insurance association, or society of underwriters in London, deriving its name from the coffee house where it originated. The records of this society contain a complete history of the sea, so far as concerns the number of shipwrecks, collisions, fires, piracies, mutinies, etc.

Loan.—A thing furnished to another for temporary use, on condition that it be returned.

Long Price.—Price after the duties are paid.

M

Malefeasance.—Evil conduct; illegal deed.

Mandatory.—A person to whom a charge is given, or business intrusted.

Manifest.—An invoice of a ship's cargo.

Manufacture.—The process of reducing raw material into a form suitable for use.

Marine.—Relating to the ocean; nautical.

Maritime Law.—Law relating to harbors, ships, seamen.

Marc.—A weight of gold and silver used as a measure for these metals in Europe.

Mart.—A commercial center; a market-place.

Maturity.—The date when a note or draft falls due or is payable.

Mercantile Law.—Law pertaining to trade and commerce.

Merchandise.—Whatever is bought and sold in trade.

Merger.—The absorption of a thing of lesser importance by a greater, whereby the lesser ceases to exist, but the greater is not increased. For instance, a note on which a judgment is recovered is absorbed by and merged in the judgment.

Metallic Currency.—Silver and gold coins forming the circulating medium of a country.

Mint.—The place where money is coined.

Misfeasance.—A trespass; doing improperly an act that might be done lawfully.

Mitigation.—The abatement of a judgment, penalty or punishment.

Money.—Coin; any currency lawfully used instead of coin, as bank notes.

Money-Broker.—A broker who deals in money.

Monopoly.—Sole permission and power to deal in any species of goods.

Monetary.—Pertaining to, or consisting in money.

Mortgage.—To convey property for the security of a debt, the conveyance being void when the debt is paid.

Mortgagee.—One to whom a mortgage is given.

N

National Banks.—Banking institutions, established in the United States under the provisions of an act of Congress, the object of which is to unify the currency.

Navigation.—The science of conducting vessels on the ocean.

Negotiate.—To transact business; to hold intercourse in bargain or trade.

Negotiable.—Transferable by assignment or indorsement to another person.

Net.—Clear of all charges and deductions.

Net Proceeds.—The sum left after deducting commissions or discount.

Non-feasance.—An omission of what ought to be done.

Note.—A written or printed paper acknowledging a debt and promising payment.

Notary Public.—An officer whose chief business is to protest paper for non-payment.

O

Open Account.—A running or unsettled account with an individual or firm.

Open Policy.—An insurance policy covering undefined risks, which provides that its terms shall be definite by subsequent additions or endorsements.

Option.—A stock broker's term for the privilege of taking or delivering at a future day, a certain number of shares of a given stock at a price agreed upon.

Ordinance.—All kinds of large guns.

Ostensible Partners.—Those known to the public.

Out-standing Debts.—Unpaid debts.

Overt.—Not covert, open, manifest.

Owe.—To be obliged to pay.

P

Panic.—A financial crisis among business men, generally the result of overtrading and speculation.

Par.—State of equality in value, equality of nominal and actual value.

Parol.—Oral declaration, word of mouth.

Partnership.—Union in business; business firm.

Pass-Book.—A book in which a trader enters articles bought on credit, and then sends it to the creditor for his information.

Passport.—A document carried by neutral merchant vessels in time of war for their protection, also a government document given to travelers, which permits the person therein named to pass from place to place.

Pawn-broker.—One who lends money on pledge or the deposit of goods.

Pay.—To make requital, to give an equivalent for goods.

Payee.—One to whom money is to be paid.

Payer.—One who pays.

Pigments.—Paints.

Pledge.—A pawn, personal property deposited as security.

Policy of Insurance.—The writing or instrument in which a contract of insurance is embodied.

Politic.—Well advised, adapted to its end.

Port of Entry.—A harbor where a custom house is established for the legal entry of merchandise.

Premises.—The thing previously mentioned; houses, land, etc.

Premium.—The percentage paid for insurance; the excess of value above par.

Price.—Current value, or rate paid or demanded in barter.

Price Current.—A printed list of the prevailing prices of merchandise, stocks, specie, bills of exchange, rate of exchange, etc.

Prima Facie.—At first view of appearance.

Principal.—An employer, the head of a firm; a capital sum placed at interest.

Procurator.—A power of attorney; an instrument empowering one person to act for another.

Pro Rata.—A proportional distribution.

Protest.—A formal declaration, made by a notary, for want of payment of a note or bill of exchange.

Quarantine.—To prohibit a ship from intercourse with shore, when suspected of having contagious diseases on board.

Quasi.—As if, in a manner, in a certain sense.

Rate.—The ratio or standard.

Real Estate.—Property in houses and lands.

Rebate.—Deduction on account of prompt payment, discount.

Receipt.—An acknowledgment of payment in writing.

Reciprocity Treaty.—A commercial treaty between two nations securing mutual advantages.

Reclamation.—A claim made against the seller of goods which prove deficient or defective.

Refund.—To repay; to restore.

Reprisal.—The act of seizing ships or property as indemnity for unlawful seizure or detention.

Resources.—Available means, funds.

Respondential Bond.—A pledge of a cargo at sea.

Retail.—Selling goods in small quantities.

Retire.—To take up one's note before due, to relinquish business.

Revenue.—Income, return; annual income of a nation for public uses.

Revenue Cutters.—Small vessels employed to aid revenue officers in the collection of duties, or to prevent smuggling.

Revocation.—The act of calling back, recalling some power or authority conferred.

Salvage.—A compensation allowed to persons for voluntarily saving a ship or her cargo from peril.

Sea-worthy.—Fit for sea; a ship worthy of being entrusted with a cargo.

Sans recours.—Without recourse.

Secondarily.—Applied to the endorser of a note or drawer of a bill, signifying that he is only conditionally liable, or liable, if the maker and drawee fail.

Seize.—To take possession of, by virtue of a warrant or legal authority.

Seller's option.—A term mostly confined to the sales of stocks, for a sale which gives to the seller the option of delivering the article sold within a certain time, the buyer paying interest up to delivery.

Shipment.—That which is shipped, embarkation.

Sight.—Time of presenting bill to the drawee.

Signature.—The name of a person written with his own hand, signifying his consent to the writing above it.

Sinking Fund.—A fund set apart from earnings or other income, for the redemption of debts of government, or of a corporation.

Sleeping partner.—One who shares the profits of a business without letting his name appear, or taking part in it actively.

Stop-shop.—A store where cheap ready-made clothing is sold.

Smuggler.—One who avoids the payment of duties by secretly importing goods into a country; a vessel engaged in smuggling.

Solicitor.—An attorney or advocate, the title of a person admitted to practice in the court of chancery or equity.

Solvency.—Ability to pay all debts or just claims.

Speciality.—A contract or obligation under seal.

Statement.—Usually a list of property, or resources and liabilities.

Statistics.—A collection of facts arranged and classified.

Statute.—A positive law, established by act of Legislature.

Stipend.—Settled pay or compensation for services.

Stipulation.—A contract or bargain.

Stock.—Money invested in business.

Stocks.—Property consisting of shares in joint stock companies.

Stock Broker and Jobber.—A broker who deals in shares or stocks.

Stoppage in transitu.—The seller of goods upon credit resuming possession after their shipment before they get into actual possession of the buyer.

Sue.—To seek justice by a legal process.

Surcharge.—An overcharge.

Surety.—A bondsman, a bail, security.

- Suspense Account.**—An account used to contain balances of personal accounts which may be considered doubtful.
- Sutler.**—An authorized vender of provisions, etc., to soldiers in camp or garrison.
- Tacit.**—Implied but not expressed.
- Tally man.**—One who receives payment for goods in weekly installments.
- Tare.**—An allowance in weight for the cask in which goods are contained.
- Tariff.**—A list of duties to be imposed on goods imported or exported.
- Tax.**—A levy made upon property for the support of the government.
- Teller.**—An officer in a bank who receives or pays money.
- Tenants in Common.**—Persons holding lands etc. by several and distinct titles, and not by joint title.
- Tenant.**—One holding property under another.
- Tenement.**—That which is held.
- Tender.**—To offer or present for acceptance.
- Tenure.**—The manner of holding property in lands.
- Testator.**—The person leaving a valid will.
- Textile Fabrics.**—All kinds of woven goods, generally restricted to piece goods.
- Tickler.**—A book containing a memorandum of notes and debts arranged in the order of their maturity.
- Time draft.**—A draft maturing at a future specified time.
- Tonnage.**—The weight of goods carried in a boat or ship.
- Tort.**—Mischief, any wrong or injury.
- Trade Discount.**—An allowance or discount made to a dealer in the same trade.
- Transact.**—To perform commercial business, to conduct matters.
- Transfer.**—To convey right, title, or property.
- Tranship.**—To transfer merchandise from one conveyance to another.
- Treasury.**—A place where public revenues are deposited and kept.
- Treasury Notes.**—Notes of various denominations issued by the government, and received in payment of all dues, except duties on imports.
- Tret.**—An allowance to purchasers for waste of 4 lbs. on every 104 lbs. of weight after the tare has been deducted.
- Trustee.**—One who is entrusted with property for the benefit of another.
- Ultimo or Ult.**—Last month.
- Uncurrent.**—Not current, not passing in common payment, as uncurrent coin, notes, etc.
- Underwriter.**—An insurer, so-called because he underwrites his name, to the conditions of the policy.
- Usage of Trade.**—Custom, or the frequent repetition of the same act in business.
- Usance.**—Business custom which is generally conceded and acted upon.
- Usury.**—Exorbitant interest, formerly merely interest.
- Valid.**—Having legal strength or force.
- Value.**—Rate of estimated worth; amount obtainable in exchange for a thing.
- Vend.**—To sell.
- Vendee.**—The person to whom a thing is sold.
- Void.**—Null, having no legal or binding force.
- Voidable.**—Having some force, but capable of being adjudged void.
- Vouchers.**—A paper attesting the truth of any thing, especially one confirming the truth of accounts.
- Wages.**—Hire, reward, salary.
- Waiver.**—The act of waiving; of not insisting on some right, claim, or privilege.
- Wares.**—Goods, merchandise, commodities.
- Warrant.**—A precept authorizing an officer to seize an offender and bring him to justice; also to insure against defects.
- Water-logged.**—Said of a ship when she has received so much water into her hold by leakage as to become unmanageable.
- Way bill.**—A document containing a list and description of goods sent by a common carrier by land.
- Wharfage.**—Fee or duty for using a wharf.
- Wharfinger.**—The proprietor of a wharf.
- Wrecker.**—One who searches for the wrecks of vessels.
- Wreck-Master.**—A person appointed by law to take charge of goods etc. thrown ashore after a shipwreck.

CONTENTS.

273

PAGE	PAGE
Abbreviations, business.....262	Business manners.....9
Abbreviations, relating to Law and Government; Ecclesiastical; Educational and Professional.....261	Business maxims.....12
Accounts, how to keep.....156	Business letter, how to write a.....45-47
Acknowledging remittance.....59	Business writing.....18-23
Addition, an easy way of.....255	Capital letters.....21
Addition, Lightning method.....256	Carpets, how many yards required for a room.....240
Advantage given by changing the evener.....235	Carpenters, complete rules for.....247
Advertisement and replies.....57	Capitals, the use of.....42
Advising receipt of invoice.....58	Card swindlers' tricks.....182
Advice, good, by great men.....14, 15	Carrying capacity of tile.....220
Affidavit.....135	Carrying capacity, freight cars.....221
Agent, how to do business with.....164	Casks, how to find contents of.....213
Agreement for sale of grain.....117	Cattle, weight of by measurement.....238
Agreement to build a house.....115	Change, how to make quickly.....166
Agreement to cultivate land.....119	Chattel Mortgage.....128
Alphabet for German writing.....39	Cheap jewelry swindle.....176
Alphabet for marking boxes, etc.....38	Checks, how to write, present, and indorse.....91
Alphabet for pen printing.....40	Checks, all the different forms.....92, 100
Alphabet (Shorthand).....41	Check, how to endorse at bank.....102
Ancient money, value of.....207	Check, how to fill out.....100
Application for situation with recommendation.....56, 58	Clearing-house system.....160
Application for a catalogue.....56	Cisterns, how to find contents of.....232
Application for a school.....60	Coal in bin or box, how to find weight of.....191
Apology for failure to pay money promptly.....55	Commercial correspondence.....54
Arbitration.....151	Complaint of a tenant.....55
Arbitration best for farmers.....152	Compound interest table.....205
Arithmetic, short rules of.....251	Contents of piles of grain, etc.....222
Articles of partnership.....142	Contracts, how to write.....108
Asking a loan.....59	Contracts, the law governing all kinds.....109
Asking for a letter of recom- mendation.....69	Contract for hiring farm-hand.....114
Assignment of mortgage.....131	Contract for renting farm.....114
Bankers' Method for computing interest.....194	Contract for sale of horses, cattle or other personal property.....113
Banker's Time Table.....194	Contract for building purposes.....113
Barbwire swindle.....177	Contracts that are not lawful.....110
Barrels, how to find contents of.....231	Conveyance, Ontario short form.....134
Bill of Exchange, or foreign draft.....106	Corn (ear), how to measure in crib.....227
Bill of Sale.....130	Correct position of the pen.....17, 36
Bills and Invoice, how to discount.....254	Cost of coal, hay, etc., how to find at sight.....226
Board and plank measurement.....244	Counterfeit money, to detect.....161, 162
Boards of Trade.....153	Credit system.....148
Bookkeeping, legal rules on.....159	Curves for brick and stone arches, how to make.....249
Brick work, facts concerning.....237	Day-book Entries, form of.....157
Burns' idea of a good wife.....72	Debts, how to collect, in Ontario and Quebec.....146, 147
Business, how to do.....10	Debts, time when outlawed in Canada and the U.S.....144
Business abbreviations.....261	Deeds.....133, 134
Business alphabet.....20	Dictionary (business).....263
Business capitals.....19	Difficulties, how to settle by arbi- tration.....151
Business and visiting cards.....76, 77	
Business calculations, rapid meth- ods in.....219	
Business Dictionary.....263	
Business energy.....4	

PAGE	PAGE
Discharge of mortgage.....126	How merchants mark goods...162, 163
Discharge of mortgage, statutory form.....132	How mortgages are written .....128
Draft, foreign.....106	How to apply for a situation..... 63
Draft, forms of a..... 25	How to collect debts .....146
Drafts (hints and helps, etc.)...97, 98	How to fill out a Check.....100
Due-bill, form of a..... 26	How to find the contents in a wagon box 230
Due-bills, how to write 96	How to find the distance traveled in ploughing 236
Education..... 11	How to find the weight of cattle by measurement 238
Enclosing Note for discount..... 59	How to find the amount of wall-paper to paper a room..... 238
Envelopes, how to address..... 52	How to find the day of the week for any date..... 257
Envelope swindle, The .....183, 184	How to measure a day's work in the corn-field 239
Errors in trial-balance 155	How to measure ear corn in a crib.....227
Estray notice.....173	How to find the number of common brick in a wall or building 229
Evening, advantage by changing...235	How to multiply by eleven..... 251
Familiar notes 65	How to write 16
Family instruction..... 14	How to write a contract.....108
Farmers accounts, how to keep...158	How to write a chattel mortgage.....128
Farm laborer, recommendation for a..... 61	How to write a lease 118
Farm machinery swindle.....180	How to write a will .....136
Fixed and movable festivals in Canada.....170	How to write business and visiting cards 76
Flourished alphabet..... 22	How to write, present and indorse Checks..... 91
Flourishing..... 32	How to keep farmer's account.....158
Foreign Bill of Exchange.....106	How to do business with an agent.....164
Foreign gold and silver coins, value of.....208	How to send money by mail .....206
Form for payment..... 31	How to find the price of any number of pounds, yards, pieces or bushels at sight.....216, 217, 218
Form of order of goods..... 28	How to multiply mixed numbers 219
Form of receipt 28	How to find the carrying capacity of tile 220
Form of a note..... 39	How to find the number of bushels in a load of grain at sight.....224, 225
Forms of keeping account.....157	How to find the cost of coal, hay &c. at sight..... 226
Foreign or International money order fees 207	How to write your name on Iron tools and glass..... 260
Franklin, Benj., to his wife..... 72	How to write, collect and transfer notes..... 78
Freight cars, carrying capacity of.....221	How to discount a note at the bank..... 82
German writing alphabet 39	How to write all kinds of receipts. 93
Get into the right place..... 11	How to write orders and due bill. 95
Gold and silver, weight and value.....250	How to do business with a bank... 99
Good manners..... 8	Indorsements of notes, bills, etc... 88
Grain, agreement for sale of.....117	Interest, banker's method..... 194
Grain, how to figure up a load.....223	Interest, compound .....205
Grain-tables, how to use..... 223	Interest, hints and helps.....192
Grain-tables..... 224	Interest, lightning method to calculate.....198
Grain in bin or box, how to find amount of.....230	Interest laws of Canada and the United States.....204
Great men, good advice by..... 14	
Guaranties, how to write.....140	
Hay, how to measure in stack etc.....228	
Hight of trees, how to find.....249	
Hints and helps for writing, accepting, and transferring all kinds of notes..... 78	
Holidays, legal, in Ontario, Nova Scotia and New Brunswick..... 171	
Honesty..... 6	

CONTENTS.

275

PAGE	PAGE	PAGE
...162, 163	Interest, time at which money	Marking alphabet 38
.....128	doubles at .....202	Measures, metric system.....212
n..... 63	Interest tables, how to use the .....195	Mechanics' Lien on property, how
.....146	Interest at 5 per cent. ....196	to secure.....148, 149
.....100	" " 6 " "197	Merchants, how they mark goods.....162
s in a	" " 7 " "198	Merchant's retail rule .....164
.....230	" " 8 " "199	Mensuration, rules in.....253
aveled	" " 9 " "200	Miscellaneous table .....211
.....236	" " 10 " "201	Misrepresentation never pays..... 12
cattle	Introduction..... 3	Models for beginning letters..... 49
.....238	Invitation, notes of 73	Models for closing letters..... 51
f wall-	Invoices, how to discount .....254	Model of Receipted Bill 27
.....238	Italian capitals..... 23	Money, how to send by mail.....206
e week	It makes the sparks fly..... 4	Money order fees, international or
.....257	Joint and several note transfer-	foreign.....207
ork in	able.....107	Money, value of ancient..... 207
.....239	Joint note that can be transferred.....104	Money, value of foreign.....208
a crib.227	Joist, scantling and timber meas-	Mortgages.....123
er of	urement.....243	" the law governing.....124
all or	Ladies' Letter-writer..... 66	Multiplication, short method.....251-253
.....229	Land, how it is surveyed .....185	
.....251	Land and lots, how to measure.....189	Nails, how many to the pound.....222
..... 16	Land on shares, agreement to cul-	Newspaper, request to change
.....108	tivate .....119	address of 70
tgage.....128	Laths amount required for a room.....242	Newspaper subscription, law of.....209
.....118	Law governing mortgages .....124	Note of acceptance 74
.....136	Law of wills.....136	Note of regret..... 75
l visit-	Leases.....118	Notes, how to write, collect and
.....76	Lease, short form of.....122	transfer..... 78
ndorse	Lease for cash or rent .....122	Notes, how to discount at bank..... 82
.....91	Ledger for farmers, convenient	Notes, all the different forms of... 84
ant.....158	form .....157	Note, model..... 83
agent.164	Letter, how to begin a 48	Notes and bills, how to indorse.....88-90
l.....206	Letter-writing 49	
f any	Letter of introduction, model...54, 61	Observations (General).....236
pieces	Letter from a young business man	Ontario short house lease.....120
3, 217, 218	to a wholesale house..... 57	Ordering books..... 59
mbers 219	Letter from a boy applying for	Order for goods, forms of 61
capacity	clerkship..... 58	Orders, forms of..... 95, 96
.....220	Letters of condolence 62, 70	Ornamental writing 24, 32
ushels	Letters of congratulation..... 62	Ornaments 30
.....224, 225	Letter of credit..... 62	Ornamental pendrawing... 33-37
l, hay	Letter of recommendation 57	
.....226	Letter of recommendation, asking	Parent's (a) excuse to a teacher.. 55
n Iron	for a 69	Parliament building in Ottawa .....170
.....260	Letter to a lady friend..... 72	Parliamentary Rules and Usages,
rans-	Letter of Dr. Franklin to his wife. 72	a complete set, for public meet-
.....78	Lien, mechanic's .....148	ings, political gatherings and
t the	Lightning method for calculating	debating societies .....258
.....82	interest .....193	Partnership.....142
eipts. 93	Lightning rod swindle .....179	Patent fence swindle.....178
e bill. 95	Logs, how to reduce to inch board	Pen drawing, ornamental. 33-37
ank... 99	measure at sight.....245	Pen printing, alphabet for..... 40
	Logs, how many feet of lumber.. ..246	Penmanship in letter-writing,
	Lincoln, Abraham, early home of 7	how to improve..... 44
etc... 88	Lumber, dry pine, weight of.....242	Personal property, the law govern-
.....194	Lumber, lightning method for	ing the sale and transfer of. ....116
.....205	measuring..... 241	Picket fence, level and over hill...248
.....192	Manners, business 9	Plastering, facts concerning.....237
o cal-	Manners, good..... 8	Ploughing, how to find the dis-
.....193		tance traveled in.....236
d the		
.....204		

	PAGE		PAGE
Postal card, how to write a.....	45	Stock Exchanges and Boards of	
Postal rates.....	171, 172	Trade	153
Property exempt from seizure in		Student (a) at school	56
Ontario, Quebec, Nova Scotia,		Success, practical rules for.....	6
New Brunswick and Prince		Sundays observed by different	
Edward Island	145	nations	166
Public roads, laws of.....	150	Subscription for public buildings	
Punctuation.....	43	or works.....	167
Rafters, how to find the length		Superscriptions, forms of.....	62
and bevels of.....	249	Superstitious (old)	169
Rapid methods in business calcu-		Surveying of land	185-191
lation.....	219	Swindling schemes.....	174-184
Ready Reckoner.....	216	Swindling note (a).....	175
Receipt, form of a.....	26, 27	Tanks, how to find contents of	
Receipt for interest due on mort-		.....	232, 233, 234
gage.....	105	Tenant's (a) complaint.....	55
Receipts, how to write all the		Tile, carrying capacity of	220
different forms	93-95	Time in which money doubles at	
Resolutions, (how to write) on the		interest	202
death of prominent persons.....	168	Timbe, joists and scantling,	
Recommendation to a young man.....	55	measurement of at sight	243
Recommendation accompanying		Town lots, how to measure.....	189, 190
an application	56	Trees, how to find the height of.....	250
Recommendation for a farm		Trial balances, how to detect	
laborer.....	61	errors in.....	155
Remittance	31	Trusts	202, 203
Remittance, acknowledging	69	Urging payment of rent.....	60
Rent, urging payment of.....	60	Vanderbilt, Cornelius.....	6
Reply to an inquiry.....	53	Visiting cards, how to write.....	76
Request to open account with a		Visiting cards, models of.....	77
wholesale house, with order.....	57	Visiting friends, request to meet.....	73
Requesting payment of money.....	55, 60	Warranty Deed (see deeds).	
Requesting settlement of account		Wages tables, how to use.....	213
Request to attend a birthday cele-		Wages tables.....	214, 215
bration.....	73	Wagon box, how to find con-	
Resignation (a).....	55	tents of	230
Royal family, the	5	Wall paper, amount to paper a	
Rules, new and practical, for		room.....	235
Ladies' correspondence.....	66	Washington, George.....	81
Rules (practical) for success.....	6	Watering-trough, how to find	
Rules (five) for spelling	42	contents of.....	234
Security for rent	122	Wealth, how to obtain.....	168
Sending subscription to a news-		Weights and measures, all kinds.....	210
paper.....	58	Weight and value of gold and	
Sending draft and receipt.....	58	silver	253
Settlement of account, request of.....	59	What to do.....	11
Shingles, lath, wood, etc.....	242	Will, how to write a.....	136
Shocked corn.....	239	Wills, the law of.....	136
Shorthand alphabet	41	Will, forms of a	138, 139
Short rules of arithmetic.....	251	Wire fence materials.....	221
Small lots of land, how to lay off.....	191	Wood, how to find the number of	
Spelling, five rules for.....	42	cords in a pile.....	242, 246
Stone-work, facts concerning.....	237		

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	PAGE
ards of	153
.....	56
.....	6
fferent	166
dings	167
.....	52
.....	169
.....	185-191
.., 174-184	175
.....	175
nts of	
, 233, 234	
.....	55
.....	220
cles at	
.....	202
tling,	
.....	243
..189, 190	
t of...	250
etect	
.....	155
202, 203	
.....	60
.....	6
.....	76
.....	77
meet. 73	
.....	213
214, 215	
con-	
.....	230
er a	
.....	235
.....	81
find	
.....	234
.....	166
nds. 210	
and	
.....	253
.....	11
.....	136
.....	136
.....	138, 139
.....	221
er of	
242, 246	